

THE CONDOR

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COOPER ORNITHOLOGICAL CLUB

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THE STORY OF THE FARALLONES

by CHESTER BARLOW

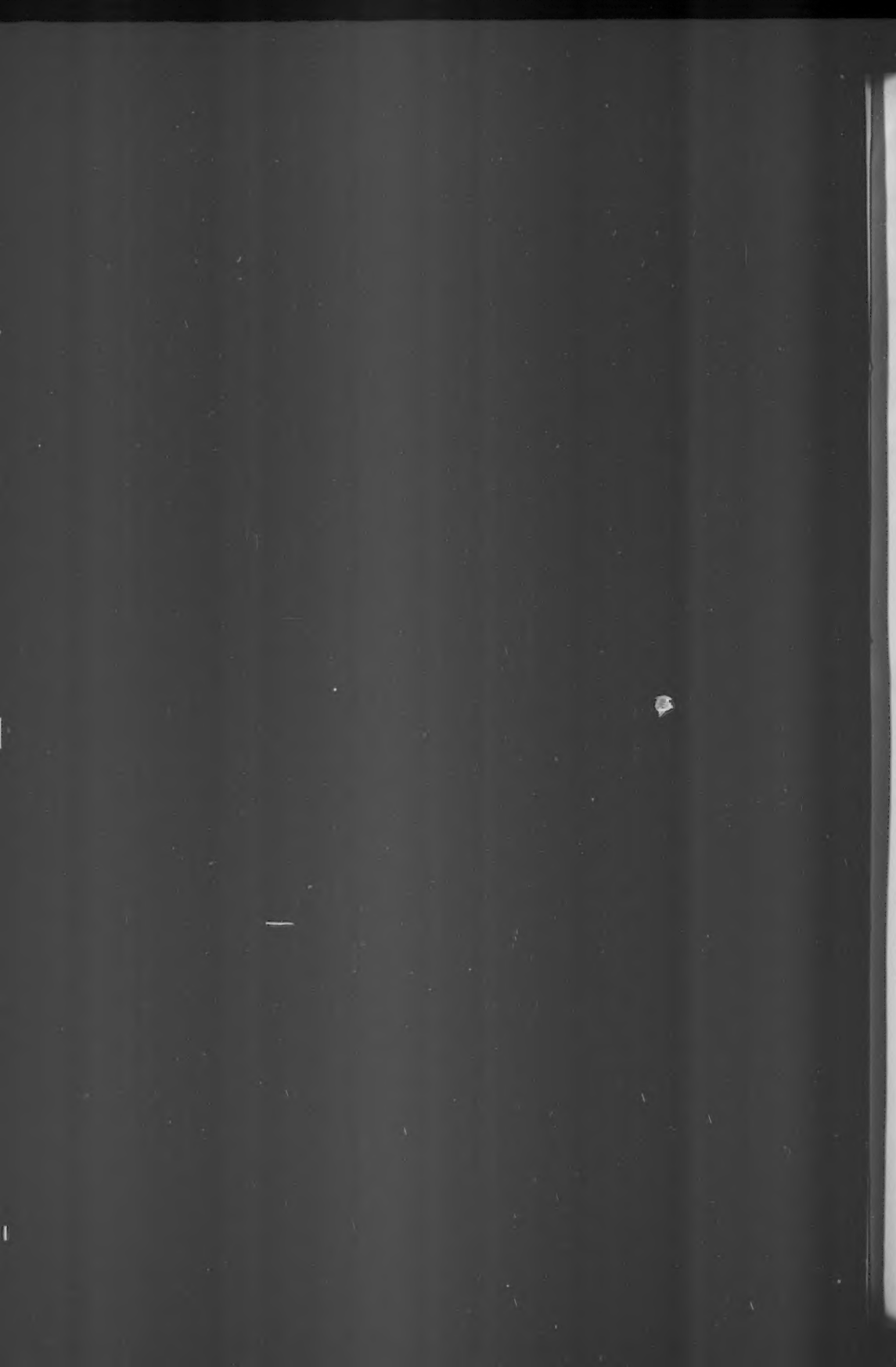
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THE CONDOR A MAGAZINE OF WESTERN ORNITHOLOGY.



Volume XIII

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THE LITERARY AND OTHER PRINCIPLES IN ORNITHOLOGICAL WRITING

By MILTON S. RAY

FROM time to time, in our various ornithological journals, appears criticism of what is termed "popular" ornithology. To discuss this and similar matters the present article is written. I consider the use of the word "popular" in connection with ornithological writing to be rather indefinite and misleading. If the line be drawn between scientific and unscientific ornithology the difference I think would be more clearly defined, for in my opinion any article treating of bird life or bird anatomy, wherein exact facts are given without any deviation from the truth, is scientific no matter in what particular style it is written, popular or otherwise.

To some, however, an article must fairly bristle with Latin before it becomes of value. To such, a check-list of exclusively Latin names is scientific; but add the vernacular as well, together with pertinent field notes, and although the article has gained instead of lost, it is now deemed semi-popular. I appreciate the advantages of Latin as an international language in nomenclature, but here, I think, its advantages end. The former custom of giving all the birds foreign names as well, has, too, a certain merit. I have an old English work which treats almost every bird in this fashion, the description of the raven beginning for instance: "Corvus corax, the Raven. This well known bird is the Korax of the Greeks; Corvus of the Latins; Corvo, Corbo, and Corvo Grosso of the modern Italians; El Cuervo of the Spaniards; Corbeau of the French; Der Rabe and Der Kohlraube of the Germans; Korp of the Swedes; Raun of the Danes; Corbie of the Scotch; Cigfran of the Welsh; Kaw-kaw-gew of the Cree Indians and Toolloo-ak of the Esquimaux." I can read this with patience and some interest but when it comes to the

work of such extremists as may be seen for instance on page 23 of *The Auk*, vol. XVI, I desire to protest. Here the subspecific characters of a very questionable subspecies of *Hylocichla* are given in this way. "CHARS. SUBSP.—*Hylocichla H. u. ustulatae similis, sed hypochondriis et partibus superioribus pallidioribus ac minus rufescentibus*." Alas! poor English, to the writer, evidently seemed inadequate to explain these intricate differences, so it became necessary to resort to a language worse than foreign. Dr. Samuel Johnson has said, speaking of certain writings of Addison in Latin, that "when matter is low or scanty, a dead language, in which nothing is mean because nothing is familiar, affords great conveniences, and, by the sonorous magnificence of Roman syllables, the writer conceals penury of thought often from the reader and often from himself." There are other instances, I think, beside certain works of Addison in Latin, to which this is also applicable.

One of our foremost ornithologists has sought to differentiate scientific and popular ornithology by the separation of the study of dead birds from live ones, and at first glance this may perhaps seem a very pleasant arrangement. In the museum the corpse is measured, dissected, its every wing and tail feather counted, and every curve of its bill or claw, and often trivial differences in coloration noted. Why do not these same exact methods prevail in the field? The answer in my opinion is because the work of the bird anatomists, following as it does certain set and well defined lines is by far the simpler. If field-work, which they are pleased to call "popular" ornithology, is so simple why can not some of these closet naturalists spare a few hours in the field and settle some of the little problems which puzzle us poor field ornithologists, such as comparative velocity of bird-flights, migration, instinct, susceptibility to the charm of certain snakes, the cause of the heavy proportion of infertile eggs in certain species, decoy nests, the possible use of bird sentinels in nesting time, the motionless flight of the gull with and against the wind, the cause of tender shelled eggs, the reason for spotted eggs when not explainable by the theory of protective coloration, etc., etc. I believe much work in the field and in the museum, as well, must be done before these problems are solved; yet certain writers contend that articles dealing with such subjects are necessarily "popular." Surely they are! Because the live bird is, and always will be, more interesting than a dead bird; but what folly to insist that the study of one is more scientific than the other!

There are certain non-essential things not directly connected with the study of bird life, that can, I think, be eliminated in the preparation of a manuscript without the latter losing any of its scientific value. For instance, in describing the nest of a killdeer as merely a small collection of even-sized pebbles, if one should enlarge and give the measurements, shape and kind of each pebble, would such information be of any particular value? Yet, on the other hand while sometimes equally irrelevant information is given, certain seemingly unimportant details are passed unnoticed. An instance of this latter sort, liable perhaps to have been overlooked if it had not been so frequent, was the finding at Lake Valley last June (1910), all told, five nests of the House Finch (*Carpodacus mexicanus frontalis*) which were in close proximity to those of the Western Robin (*Planesticus migratorius propinquus*). Perhaps these cases were simply the result of accident. The nests of the House Finch in every instance were the last built, but this fact proves little as this is in accordance with the usual nesting dates of the two species in the valley. In a region overrun with chipmunks, whose depredations on bird life are incalculable, a desire on the part of the House Finch to gain protection by propinquity to the home of a larger and more combative bird is certainly an interesting trait and worthy of

further investigation. Another instance was the finding, in the above locality, of several deserted nests of the Western Robin and the Sierra Hermit Thrush (*Hylocichla guttata sequoiensis*) containing either two or three apparently fresh eggs, while a dried up egg-shell lay beside them. I suspected whatever agency had destroyed the one egg was incapable of destroying the others, and concluded it to be the work of some insect. It was only last year, however, that I was afforded the opportunity of solving it. I came across deserted nests of eggs of both the above mentioned birds. In each nest an egg had been clawed, and the nest was swarming with ants. Whether the birds had deserted just after the egg had been clawed, or on the arrival of the ants I am not prepared to say.

It is a mistake, I think, to abbreviate in any way the Latin name even if it exhaust every letter in the alphabet; for its chief virtue lies in being an *exact* name and this is lost when the name is not given in full. An instance of this kind occurs in the work of a very thorough ornithologist and one of unquestioned ability, and may be seen on page 424 of Davie's *Nests and Eggs of North American Birds*, 5th Edition. A nest is stated to have been placed "in a Negundo 30 feet high." I suspect this originally stood *A. negundo* and was misprinted to its present form, and that it was intended to be an abbreviation of *Acer negundo californicum*, the Cut-leaved Maple. Surely if it was worth while using the Latin term it was worth while giving it in full, otherwise why would not the vernacular name have sufficed?

No one can but realize the monumental work that has been done by Ridgway in the interests of ornithology, nor doubt its scientific value. Yet the writer must acknowledge in perusing that great book, "The Birds of North and Middle America", that he is puzzled to know the object of the vague and scattered descriptions of eggs given. These are almost absent in the earlier volumes but quite common in vols. III and IV. As they stand I do not see how they can be of much use to the student of oology, and if they are considered of value why were they not given uniformly throughout the work?

Personally I am opposed to the present rush to name new subspecies based on the ideas of a single worker, often on doubtful or insufficient evidence, frequently on a single skin, and, as recently, on only a portion of one. These I think only tend to hinder our progress in the study of geographical variation, for, when passed upon by the authorized judges, the past has shown that over half of these new subspecies are bowled over like ten pins, although their remains clog our literature for years afterward. If a constituted body has the authority to determine the standing of these claimants to subspecific rank why would it not be the better plan to first submit the specimens with their proposed name, etc., to the committee, and such as are favorably passed upon given out for publication?

I favor, too, set vernacular names based on the true relationship of birds, and I am opposed to calling, for instance, a falcon a sparrow hawk, or a turkey vulture a turkey buzzard simply because the latter names are the most familiar to the general public. The public needs education not misinformation.

As to the Latin names, like many others I would like to see them possessed of a cast iron stability. But as long as certain priority hunters are allowed to, and persist in delving into long forgotten, obscure and musty books, to find out what some one called a certain bird in 1847 or some other year, it appears the ceaseless change will continue. And all to what purpose? The Check-List as it stands is ample for all purposes, I think, and a new canon should declare it permanent, allowing no change except cancellation where a supposed species or subspecies is found nonexistent, or change in a generic name where the species is found to have been placed in the wrong genus. And after all what reasons can be given against

stable nomenclature, except mostly those of sentiment? Suppose some early writer did call the Eastern Bluebird *Sialia sialis* in Trego's Geography in 1843 or some other obscure book? If he did not care enough about publishing it in the proper channels why should we take the trouble to resuscitate a name that now lies buried? And as a fact these early workers were in the true sense seldom discoverers of many of the species they named, for many of these birds were known by name to the Indians for untold centuries perhaps, before the white man came. And that the former were often close observers of bird life can be seen by perusal of those unique articles in the earlier volumes of *The Osprey* by Chief Pokagon of the Pottawattomies: "Ke-gon Pe-nay-sey and Win-ge-zee,"¹ "Au-mon Re-nay-shen,"² and "O-jaw-aw-ne."³ There is something pathetic in the writings of this old Indian chief, almost the last of a vanishing race, telling, and with a rare command of language, of youthful journeys from his wigwam through the unbroken wilderness to study the birds.

Ridgway has said that "the classification of birds, their synonymies * * * is scientific." This is no doubt true, but to me the continual wrangling and wrestling over priority seems a rather mild form of it, and I think it is apparent that no matter what arguments are offered in favor of the present system, that it is detrimental to the advancement of ornithology, and proof lies in the fact that even some of the museums, wearied by the endless change of names have adopted the vernacular in labeling skins. I have little doubt that a post card ballot of active ornithologists would show an overwhelming majority in favor of nomenclatural stability.

Unscientific ornithology, such as those inexact, careless or exaggerated articles which frequently appear in current magazines or newspapers, merits but a passing notice. Most of these articles are soon forgotten, as they deserve to be. Yet even though they misinform, as they serve to interest the general public in bird study they are to some extent beneficial. The most glaring collection of mis-statements I ever read was published in the *San Francisco Call*, February 3, 1895, entitled "The Singing Birds of California." Illustrations from Wood's Natural History were used in connection, and our state credited with such surprising species as the Vervain Hummingbird, Chaffinch, Yellow Hammer,⁴ etc. The text is on a par with the illustrations and a very short excerpt will suffice: "The orchardist does declare war against the yellow-hammer which belongs to the family of buntings and is cousin to the ortolan. He feeds on almonds when they are young and milky and they make the bird very toothsome picking for the epicure. He has a cry rather than a song which is variously translated." Perhaps in this latter respect there will be found considerable resemblance between the cry mentioned and the bird of the excerpt itself.

The opinion seems prevalent that the combination of a good writer and a good ornithologist is rare, and that the polish literature gives an article on ornithology is detrimental to its interests. With those who hold such views I beg to differ. If one refers to the work of almost any of our foremost ornithologists it will be found, I think, that while their style is not highly figurative, for the occasion seldom demands it, it is almost always fluent, forceful and clear. In fact the true scientist, is, I think, one who has mastered the intricate details of his work and is able to tell of them. If he lacks the flow of words to depict his discoveries or theories in accurate, clear and convincing language how can we much believe in his accom-

1. The White-headed Eagle and the Osprey, Vol. I, p. 51.

2. The Chimney Swift, Vol. I, p. 120.

3. The Bluebird, Vol. II, p. 102.

4 Not *Colaptes cafer collaris*; the bird in the cut is evidently *Emberiza citrinella*.

plishments? I can see no need for this endeavoring to take away the literary value from ornithological writing, for I consider it a decided asset. I have read articles on subjects of little range, and that usually are of a rather dry nature, yet written in such an entertaining way that they were equally as interesting as some experiences in the field, and yet not a whit of their scientific value was lost. The writer who inspires, instructs; and he is one who possesses true enthusiasm, accurate knowledge and the mastery of word values.

Audubon, famous as an ornithologist, has had some of his writings placed among the world's literary classics. One cannot read Bendire without appreciating his delightful style, and these are only a few of many. For files of *The Auk*, *The Osprey* and our own CONDOR contain articles which aside from their scientific value must be given a high rank in a literary way. The high water mark in the latter respect is reached by Welch, I think, in his famous "Echoes from an Outing." I frankly confess that this fascinating reverie was instrumental in luring me off to Fyffe in the Sierran wilds one summer, and as a result I have journeyed to some point in the region almost every year since. It has been said that Welch's article is not scientific on account of its lack of the definite Latin names, and because of this must remain buried where it now is. Perhaps as far as scientific records are concerned this may prove correct, but I believe it will receive a place in literature and still be enjoyed, while descriptions of some of the myriad subspecies of song sparrows, which brought joy to the hearts of their discoverers, are buried beneath the dust of years. True literature is not for an age but for all time, and an example is shown by the work of Gilbert White, which loses none of its interest, and continues to be reprinted, year after year. Where White gains is the felicity he has for blending real information and literature.

And I contend further that not only does literature make scientific ornithology more readable and interesting but that it is also a positive aid and that at times ornithological science must lean heavily on its helpmate, literature. Has our advance in ornithology been so great that the help literature gives can be cast aside entirely? If one desires to learn of the song of the Hermit Thrush or Water Ouzel will it be found in the bulky technical works? In fact is bird song itself not rather art than science? Can one learn ALL of the everchanging iridescence of the throat of a hummingbird, or the rare painting on a falcon's egg by such a flat description as purple no. 38 or red no. 122? I maintain that there are *certain* things in ornithology that require both literature and science jointly to be properly described.

It is a generally accepted fact, I believe, that many readers shun the strictly technical articles, and this I attribute to a number of causes. The principal reason, I think, is that most articles of this nature treat of geographical variation, a subject which has lost interest because the standing of so many of the subspecies is seldom a settled fact. Other reasons are that many technical articles lack the very literary quality I have spoken of, and also that many readers have not acquired a taste for comparative anatomy. A reader voiced this latter sentiment in the technical *Auk*, vol. xx, page 234, to which the editors replied in what I considered a surprisingly frank and rather un-*Auk*like fashion, saying in part: "It is the aim of the editorial staff of *The Auk* to cater especially to the popular side of ornithology, to furnish to the amateur readers papers that they will enjoy and find profitable. The technical side will always take care of itself; the demand for space for such contributions is always greater than the supply and it is papers of this character that get the cold shoulder and not those of a popular character, provided of course they contain something worthy of record."

While I realize the wide gulf that must ever exist between poetry and orni-

thology, to close the present essay without some reference, at least, to the highest of all forms of literature would be to leave it in a sense incomplete. Although it has often been stated to the contrary I hope to show that the possession of the poetic temperament does not necessarily incapacitate one for scientific work. Many instances in proof of this could be given, but a few will perhaps suffice as well. One of these is the case of Alexander Wilson, whose standing as an ornithologist is unquestioned. A poem by Wilson is reprinted in *The Osprey*, vol. III, p. 98. Here in our own club we have Mr. Lyman Belding who has done much conscientious bird work. He is a poet as well, and verse entitled "The Sierras in June" appeared in vol. II of THE CONDOR. Still another case is that of Hudson Maxim, the great English inventor, who is also a poet of no mean order. The *Literary Digest*, vol. 41, no. 14, in reviewing Maxim's "The Science of Poetry and the Philosophy of Language," states in part as follows: "The mere fact of his writing such a work, is in itself interesting; for, apart from its distinctive merits, it gives new evidence of the versatility which so frequently characterizes high intellectual talents. That an eminent scientific inventor should appear as an expert critic of poetics will, undoubtedly, surprise many minds; but many others will remember how philosophers have come to recognize it as axiomatic that men of large capacity are capable of varying their achievements according to volition in many directions * * *. It is somewhat startling to find a foremost scientist affirming that poetry has a stronger hold on us than science itself * * *. But the chief charm of the literary feat, for most readers, may be found in the plunges made by the author himself into poetical composition."

Birds, ever especial favorites of the poets, have inspired such immortal masterpieces as Shelley's "To a Skylark", and Keats' "Ode to a Nightingale", and no one I think can hear the song of the Water Ouzel amid the roar and spray of some mountain torrent, or the cold, pure music of the lone Hermit Thrush in some dark wooded canyon, music like that of the masters, apparently simple but profoundly deep, and not become appreciative to some extent of the sentiment that moves the poet. At times I have felt this spell myself, but poetical composition does not come easily to me and I have written but little, while that published is limited to a few lines in *The Auk* of October, 1906, and those given at the end of this article. For these latter lines I make little claim for merit, and no doubt those who have taken up this branch of literature will be of the opinion they should have been written in the octosyllabic couplet rather than in blank verse. In this instance, however, the latter serves my purpose best as I desire to show that it is the metre and rhythm, and not necessarily the rhyme that gives the word pictures their sentimental setting. Poetry at its best excels in the indelible imprint it leaves on the minds of those susceptible to its influences, and there are certain famous passages that haunt one's memory forever. Great condensation too is another of its virtues and to take a very modest example, this closing poem, for instance, would no doubt tax twice the number of words in prose. I may say in explanation I spent two weeks on the Farallon Islands in May and June of 1904, and anyone interested will find the birds and particularly the remarkable nests of the Rock Wren described at length in the October *Auk* of the same year.

BIRDS OF THE FARALLONES

And while it yet was spring the sea-bird hordes
Would come, to make the isles their summer home;
The laughing murrelets that crowded shelving cliff

And dark surf-echoing cave; the cormorants,
 Jet fishermen and gatherers of mosses gay,
 Who on the terraced rock their cities of weed
 Would build; web-footed pigeons of the sea
 That whispering, cooed along the spray-tossed shores;
 The snowy gulls with mouse-gray backs and black-
 Tipped wings, that plundered all their feathered kin;
 The queer-beaked puffins with long flowing curls
 That in the rock recesses lived; and with
 The night, from sea, and from their burrows came
 The auklet-thousands with weird cries; and from
 The crannied rocks the perfumed petrel,
 Daintiest traveller of the sea, lone welcomer of storms.

But all this noisy crew gave nought to the isles
 Of song. Yet, wandering with the winds
 From granite gorge or sea-opposing cliff
 Rare melody would come: the rock-wren's song;
 That oft the islanders would pause to hear,
 So wild and free and crystal clear it was!
 So strangely sweet, so ever new! And they
 Had found where paths by myriad pebbles paved
 To hidden bowers led; quaint tiny caves
 Wherein a floor was made of tide-worn stones
 And bones of furred and finned and feathered tribes,
 Long-bleached by sea and sun and inlaid bright
 With bits of abalone pearl, while scattered lay
 A world of treasure! No jackdaw's cache
 Ere rivalled the wealth of these Salpinctian homes.

NESTING HABITS OF THE WESTERN FLYCATCHER

By HARRIET WILLIAMS MYERS

WITH ONE PHOTO

ON June 17, 1910, I made a trip to Camp Rincon, in the San Gabriel Canyon, for a week's bird study. From Los Angeles we went by trolley to Azusa, and from there 14 miles by stage through the San Gabriel Canyon to the camp, which is very near the San Gabriel River and has an elevation of 2000 feet. One of the pretty trips from this camp was to a place called Fern Canyon. It extended about one half mile into the mountains and was so narrow in many places that it was little more than a trail beside a small stream. The banks rose high above our heads and were overgrown with shrubs and trees. Alders predominated, but there were also rock maples, oaks, sycamores and bays.

On June 21, at almost the end of the canyon, in an alder tree that grew close beside the water, I discovered a pair of Western Flycatchers (*Empidonax difficilis*) feeding their young. The nest was on the southeast side of the tree in a crotch made by a dead stub a foot long. There were no leaves near it, so our view was

unobstructed. Though this crotch was about twenty feet from the foot of the tree, the bank rising steeply from the stream passed not far from the nesting site. On this sloping bank my companion and myself were able to rest and watch every move of the birds.

The nest was darker than the tree trunk but matched the shadow in the crotch. It was made entirely of fine plant fibers. The location of the nest reminded me of one of the Western Gnatcatcher which I once watched which was built on the side of a sycamore tree in much the same way, the chief difference being that in the latter case the supports were new leafy shoots.

It was about 8:40 when we sat down to watch these little flycatchers. At that time both birds fed, one having a moth in its bill which was fed to several young. After feeding, the female sat on a near-by limb and guarded. The male fed four times in six minutes, resting on the edge of the nest one-half minute after the last



Fig. 33. NEST OF THE WESTERN FLYCATCHER

feeding. As the bird fed we could just see tiny bills above the nest. There seemed to be three of them.

For the next eight minutes the female fed, making three trips and resting on the edge of the nest a short time. Then the male fed three times, then for thirteen minutes both birds fed in all seven times, then they seemed to divide the labor again, the female feeding for a time, then the male doing all the feeding. Perhaps I am wrong in this conclusion, but in the three hours and forty minutes that we watched them, I came to the conclusion that it was their way to take turn about in the feeding. Sometimes the watching bird would be seen perched in a tree not far away; at other times it was out of sight. During the three hours and forty minutes the young were fed sixty-three times, the female feeding thirty-three times to the male's thirty, the shortest interval being one minute, the longest ten and one-half minutes.

At 9:30 the sun was shining on the nest when the female came to feed, and we could see long necks, dark fuzzy heads and broad yellow bills. After feeding the mother slipped onto the nest, resting lightly above two of the birds, the third one showing on our side. Presently the mother raised higher up and partly spread her wings. For three minutes she thus shielded the nestlings, when the male came to feed and she flew away. The male did not stay this time, but a few minutes later when he came to feed, he rested on the edge of the nest and finally slipped onto it, where he stayed ten and one-half minutes. In my mind there is little doubt but that the male helps brood the eggs, for never have I seen a bird that did not share the brooding take the nest as this one did.

The common call of this pair of birds, one that I heard on the upward trip and all about our camp, was a "pe-wit" or "see-rip". This was given by the female quite frequently before and after feeding. The male used it in the same way but not so frequently. Only once did I hear any other note and then it was only a little varied.

The food brought seemed to be large winged insects to a great extent. Sometimes they were so large as to make several feedings. The female often foraged quite near the nest in a damp place under the bank. Both birds sat about on limbs not far from us and seemed not to mind our presence.

I made only one other trip to the nest and then I took my camera. The nest was so far away and the light so uncertain that not very satisfactory results were obtained. However, the camera shows the location of the nest. For the rest one must use the imagination.

MY AVIAN VISITORS: NOTES FROM SOUTH DAKOTA

By H. TULLSEN

The bird's point of view differs scarcely at all from our own in the essentials of life: Protection from enemies, the preservation of the family, a sheltered home, congenial environment, abundant food, and pure water—these natural rights, the birds, like man, are ever seeking.—NELTJE BLANCHAN.

THE conditions of existence to which animals are normally exposed are not so tranquil and unexact that such creatures are rendered unwilling to take occasional advantage of opportunities to try other and different environments. This we sometimes see illustrated in the fact that birds, in order to obtain food in greater abundance, shelter from cold, or security against the attacks of their natural foes, at times will temporarily or permanently forsake their wild haunts and seek the environs of the habitations of men. Of course it is to be admitted that our feathered friends frequently visit our dooryards and gardens for mere variety's sake, or in obedience to the promptings of curiosity, or, perchance, owing to a spirit of daring; but the fact remains that necessity and want, or at least a hope of *sooner* finding the means of appeasing hunger than under ordinary circumstances, are oftener the agents that move such callers to come.

In southwestern South Dakota, on the Pine Ridge Indian reservation, I had ample opportunity to observe the behavior of farmyard and dooryard bird-visitors of both the main categories named above, viz., seekers of food and shelter, on the

one hand, and idle loafers or sight-seers, on the other. In the winter of 1902-1903, and that of 1903-1904, I kept a stack of prairie-hay, another of oat-fodder, and a third of squawcorn stalks with the ears left on. These stacks proved a great attraction to the birds. They stood a little distance from the dwelling house, on the bleak plain, and high above the flood-plain of Medicine Root Creek, which lies two-score rods to the west. To the east are the treeless higher hills, and to the south and southeast rise other hills upon which grow groups of pines (*Pinus ponderosa scopulorum*). The creek-plain, which lies far below the general surface of the adjacent country, is densely covered with a growth of deciduous trees and shrubs.

At all times to the dooryard came the Magpies (*Pica pica hudsonia*). Mischievous and thievish though they are, I know of no other birds among all my acquaintances more attractive and charming than they. Whilst watching their antics and hearkening to their friendly, conversational chattering, one can almost forget that at some time or other the very birds that he is observing may have killed and eaten by inches the saddle-galled pony of a Siouan "brave." Each winter, among the sixteen or twenty Pies that made daily visits to search for edible matter among such refuse as had been thrown out, came one or more that had parted with their tail-feathers. These appendages, the Indians informed me, had been left in some steel trap set for small four-footed game. The tailless individuals, however, as it seemed to me, were about as well off as were those that still were "whole"; for when the latter leave the sheltered groves that border the water-courses, and ascend to the higher ground, I have noticed that they are considerably inconvenienced, in the high winds, by having such large caudal appendages. In the mornings, when one is trying to muster self-command enough to persuade himself to rise, outside the window can be heard the chattering and scolding of a dozen or more of these birds. Only at the time of courtship and nest-building are their visits to the doorstep comparatively rare. Curiosity certainly is an element in their mental make-up. On one occasion I saw sixteen of them gathered round a domestic cat, all sitting very still, intently watching the feline, and jumping quickly and nimbly back at his slightest movement. Nevertheless, as a rule, they seemed to have little, if any, fear of this cat. He and they were often to be seen together culling edibles from a box of garbage.

At another time, however, and in another place, the cat in the case did not fare so well. One morning at Grass Creek, South Dakota, I was awakened by the excited shrieking and chattering of Magpies. On going to the window I saw an old house cat in a couchant attitude, about two rods from the door of the cottage. His tail was coiled closely about his feet—for safe keeping, as developments presently showed; and he appeared ill at ease as he watched a pair of Pies that were hopping about him, their dark eyes glistening with deviltry. At length the cat rose and started to walk toward the doorstep. Immediately, first one bird and then the other hopped quickly forward and nipped the end of Tom's tail with its bill. All that the cat did to show his resentment was to turn half round with a protesting "meow!", after which he squatted down again. When he arose once more the whole performance was repeated, and it was only when the feline reached the stoop that he was suffered to rest in peace. It is said that jack rabbits are sometimes harrassed by these avian mischief-makers in like manner.

Often one (and, I think, always the same) individual of the flock of Magpies at Medicine Root Valley would reply to a teasing chatter uttered by a person in the house, and whilst so doing would approach very near to the door or window whence came the challenge. Magpies when tamed may be taught to articulate a

few words. A gentleman who has spent much time among the Indians informs me that on one occasion when he was passing a modern Siouan home a Magpie on the haystack distinctly uttered the words "How, kola!"—which, being interpreted, is "Howdy-do, friend!" I myself have heard a tame crow "talk Indian."

A young Magpie that I took from a nest in this vicinity and brought to Illinois, became very much of a pet. It was allowed the freedom of the town, and took a legitimate advantage of its liberty, always coming home to roost and feed. This bird suffered an untimely death by drowning in a barrel of water, and his taking-off was the cause of much lamentation in the household to which he had been attached for nearly a year.

Magpies soon learn to distinguish the sound uttered by a person when calling the chickens to be fed, and are apt to appear suddenly and unbidden to partake of the meal. More than this, they are known to have a liking for the flesh of the very young chicks themselves, and it is therefore unsafe to allow a hen with a brood less than fifteen days old to range far where there are Magpies in the neighborhood.

When the breeding season commences the Pies keep close in the thick tree-growth along the creek where they build their massive nests; and now they come to us in pairs occasionally instead of in a flock as at all other periods. At this season they utter a note not heard at other times,—a soft, tender call, hard to describe or imitate. It has often been said that their nests are "as large as bushel-baskets," but structures much larger than this are common. Where I observed them, nests with eggs were most numerous in the month of May. Two nests which I examined in 1903 were about ten feet from the ground. On May 7, 1904, I found a nest saddled upon buffalo-berry saplings, and so low that I had to look down instead of to climb up, in order to peer into it. On the date mentioned it contained two eggs, and an additional one was laid each day thereafter until the clutch, numbering seven eggs, was complete. A short time afterward this nest was robbed by Indians. Among these people, by the way, sympathy for animals is an unknown virtue, as to some extent is the case among small boys, who, like savages, sometimes lack certain of the nobler instincts, and, as one consequence, are often responsible for much suffering among animals.

Nearly every bird has its own manner of flight, and although it be far off where color and form alike are indistinguishable, yet the student of ornithology ascertains from its way of progression through the air to what species a given bird may belong. The peculiar wavy flight of that small bird tells him of a goldfinch; the similar, but heavier, flight of the woodpecker is known to him; like an arrow the Mourning Dove shoots by, while perchance the whistling of its wings may be heard; sailing with the clouds, high overhead, are the nighthawks and swallows; and in the near horizon that lazily flying creature with the tail of a comet is a Magpie. Sometimes I have conjectured that that strange bird the *Archæopteryx*, bore a similar general appearance as he flew through the pleasant air in that far-off Jurassic day.

To my fodder-stacks, in early spring, came the Western Meadowlark (*Sturnella neglecta*). This is a bird of marked individuality; it differs from the Eastern Meadowlark in appearance, and its highly variable melody is quite unlike the song of its congener. On two occasions when passing through the sand-hills, a few miles to the south, while the songs of meadowlarks filled the air, I could easily distinguish the notes of the eastern birds, one or two of which I now had the pleasure of seeing for the first time in that country among the multitudes of the

other species. Afterwards, however, along Lake Creek, about forty miles to the southeast of my station, in a marshy valley about three miles wide, I found that the Eastern Meadowlarks were very abundant. In this valley the western birds were very few, but on entering the low sand-hills that bordered the valley on the south, or the somewhat higher limestone hills that lay to the north, we came into a region where this species alone was to be seen and heard; positively never a feather of the eastern bird was ever met with out of the valley.

Persons having no special ornithological bent, but with a desire to know something of wild life in general, on coming to South Dakota from the east, have asked me with reference to the western lark, "What is this bird hereabouts that looks like our Eastern Meadowlark?" This inquiry indicates that the differences between the two birds are sufficiently great to enable those that make no pretense whatever of being versed in bird-lore to perceive readily that marked dissimilarities exist. And to the great majority, the bird of the east and the bird of the west will always be two entirely different birds, notwithstanding the fact that the American Ornithologists' Union used to consider *neglecta* to be a mere subspecies, or varietal form, of *magna*.

In the year 1902 my date for the arrival of the western meadowlark was March 22. The next day the weather turned cold and blustery, and so it continued for several days; but the birds became immediately common. In 1903, when the spring was wintry and uninviting, I saw the first individual of this species on March 26. The Indians, however, reported having seen some of these birds on the preceding day, near the head of Medicine Root Creek, a few miles to the southward. By March 28 they were present in full force.

The spring of 1904 was warm and dry, and on March 3 I saw a lone meadowlark near my stacks. But again the irrepressible red men put forward claims of priority; they insisted that they had seen their birds some few days before. On March 5 I saw several individuals, but the species did not become abundant until about two weeks had elapsed.

It was remarked that their song is highly variable, and indeed I am almost inclined to state that no two individuals sing exactly alike. This is an illustration of the truth pointed out by Darwin that "secondary sexual characters are eminently liable to vary, both with animals in a state of nature, and under domestication." Such "contingencies are highly favorable to sexual selection." And likewise, without doubt, this extreme variability of the melody is one circumstance that contributes toward rendering it so very pleasing to our ears, for the meadowlark is one of the most admired of Dakota songsters. He runs in the yard with the hens, and ever and anon he perches upon a fence-post or shed to pour forth his melody, which no more admits of satisfactory description than does any other bird-lay. That courtship song, less often heard, which is caroled forth by the male whilst on the wing, is one of the most beautiful sounds in all nature.

The Oglala Sioux imagine that the Western Meadowlark talks to them in their own language. Rendered into English, some of the phrases which the ordinary song is fancied to resemble are, "My friend, I like the calf," "Sister-in-law, comb my hair," and "The lightning will kill you."

The last stragglers of the migrating hosts of meadowlarks seen in the autumn of 1901, were two birds noted on October 17. In 1903, September 12 brought snow, and following came about a week of wintry weather; thereafter the autumn was pleasant enough. My last date that year for the meadowlark was October 23, when a single bird was recorded.

TO THE MEADOWLARK

O, blithesome bird,
Thy voice is heard
While yet the Frost-king rules the land,
And e'en when flowers,
'Mid fragrant showers,
Are waked to life by Springtime's wand.

And yet so sweet,
Thy song is meet
To thrill the pulses of the gods,
When on a gay
Autumnal day
Thou singest 'mid the golden-rods.

That sound so clear
From far and near—
That sound so common, yet so rare—
That joyous flood,
Euterpe's blood—
Pours out to drown the fiends of care.

For ages long
That selfsame song
Unchanged has welcomed each new day;
Would Faith and Love,
All else above,
Were changeless as thy wondrous lay!

That beautiful relative of the meadowlark, the Red-winged Blackbird (*Agelaius phoeniceus*), was not a common visitor to the barnyard at Medicine Root. He belongs to the low-lying meadows and the marshes, and in order to ascertain with any accuracy his times of arrival and departure, we must be on hand at such places in spring and autumn. On March 11, 1904, however, I saw a Red-wing at my haystack. On April 20 of the same year a male Yellow-head (*Xanthocephalus xanthocephalus*) also paid me a visit. Either of these two birds is not common thereabouts. But along the sluggish streams and among the swampy meadows that abound in many regions of that country, both the Red-wings and the Yellow-heads are very abundant. At Grass Creek, about forty miles westward, I found the Red-wings in large numbers nesting in the wolfberry thickets throughout the month of June.

Among the afore-mentioned pines dwell the Pinyon Jays, or Blue Crows (*Cyanocephalus cyanocephalus*). "Pinebird" is the vernacular name, and not a bad one, either. These, as a rule, are birds of the wilds, which at most seasons fly about in sizable flocks, uttering weird cries, half caw, half mew. Once in a while a flock will alight near an Indian tepee, investigate for a moment, then fly away. They are fond of hovering along the high bluffs that border the creeks, and peering into the cracks and crevices thereof. While thus employed, I presume that they are in search of insects and their larvæ. At No Flesh Creek, not far from my station, I on one occasion saw a Clarke Crow (*Nucifraga columbiana*) in company with a troop of them while thus engaged. I heard his squawk, or chatter, above the screams of the jays, and was thus led to discover him. This

was the only representative of the species that I ever saw thereabouts. In autumn the Pinyon Jays were most attentive to a small field of squaw corn near the brook, and at the base of a pine-clad bluff that was a favorite resort of these birds. They attacked the grain while the stalks were standing, as well as when in the shock; and in this work they were ably assisted by Blue Jays and Red-headed Woodpeckers.

As was implied, Pinyon Jays are not generally to be classed as loafers about outbuildings, haystacks, and barnyards. But in February of the year 1904, one lone individual stayed about my buildings for several days to hunt for grains of corn and oats. Sometimes the kernels of corn were swallowed entire, and at other times he fixed them in crevices of posts and rails, and cracked them with blows from his beak, in the manner in which his cousin, the Blue Jay, opens the hazelnuts stolen by him from some shed-roof where they have been put to dry. I was able to approach within two or three yards of this bird, whose kind are always so shy—so near, in fact, that I could easily distinguish the whitish feathers of his throat. His first appearance occurred immediately following a light fall of snow; when this had melted away he disappeared for a few days. On the morning of February 24, however, a light mantle of snow again covered the surface of the earth, and my acquaintance came flying from the pines, and alighted on a post near me. Soon I saw him working away at an ear of corn, and swallowing the unbroken kernels as they were detached. Each time did he come alone—never brought a friend to partake of the abundance of his fare. Perhaps he thought it not worth while to do so, for he soon tired of his semi-domestication, and came no more.

It seems meet that these birds should dwell in a region so suggestive of ancient days. Dimly in the northwest appear the Black Hills, which were upheaved in a nameless day between Cretaceous and Miocene time. The Bad Lands, turreted and sculptured by the tireless forces of Nature through a lavish waste of years, and yielding the remains of strange creatures that lived and loved long æons since—these lie to the northward. On the ancient buttes and bluffs, the relics and ruins of Miocene deposits, flourish the pines, which belong to a group of seed-bearing plants the heyday of whose existence was in the Triassic age, at least fourteen million years ago. And among these trees rove the Pinebirds, themselves illustrative of things that are past. For they are a link between the crows and the true jays—a combination of both—and resemble some ancient bird that was the common ancestor of the two subfamilies.

In the region of the Great Plains the Robins (*Planesticus migratorius*) are not always the familiar dooryard birds with which we are so well acquainted in the east, and elsewhere. If, in the locality of which I write, your house is situated near the creek, then assuredly you will have these birds always with you at the proper times. But, living on a treeless hill, about all that you will hear of them comes wafted from the groves below, or their soft screech may be heard as they pass overhead. Occasionally, one or two will visit your barnyard or lawn in quest of something new in the way of diet. While the majority of them migrate, a few Robins remain in this region throughout open winters.

Tree Sparrows (*Spizella monticola*) were familiar visitants to my barnyard in winter and spring. They spent much time near the forage-stores, where now and then a Snowbird (*Junco hiemalis*, etc.) was to be seen among them. These latter are more shy than the sparrows. On the flat, weed-covered valley of Lake Creek, Tree Sparrows were more abundant than here, while the Juncos were less so. In the spring of 1908, at Lake Creek, among the hordes of sparrows, I saw a solitary

Snowbird which remained with them in the vicinity of the dooryard for about two weeks before he disappeared.

There is something strange and interesting in this fact of the associating in flocks of different species of more or less closely-related birds. What do the two or more kinds think of one another? Ofttimes I watched this particular Snowbird as he hopped about among the sparrows in search of food. To all appearances he was treated as one that had been "adopted into the tribe."

Western Lark Sparrows (*Chondestes grammacus strigatus*) in 1904, first made their appearance on April 30, and became common at once. During many hours each day they were much in evidence about the dooryards in goodly flocks, especially where grass or other low vegetation was to be found, and there, as in other regions of the country, they displayed a partiality for the immediate vicinity of fences, or similar structures. On cool and drizzly days they sometimes collect in considerable assemblages as if to seek good cheer in large numbers. At Grass Creek, on such a day, in June, 1905, I counted forty-six of these sparrows perched on a barbed-wire fence.

The Lark Sparrow is imposed upon very frequently by that prince of vagabonds, the Cowbird. On June 28, 1905, I found a sparrow's nest on the east slope of a steep hill, and near an elm tree at its foot. The nest contained five eggs, three of which belonged to the owner of it, and the other two to Cowbirds! On July 8, I found that the nest had been abandoned, and that there was only one Lark Sparrow egg remaining therein, and none whatever belonging to the Cowbirds. What had removed the eggs that were missing and caused the sparrows to desert the remaining ones, I know not. There are many mysterious disappearances continually occurring to puzzle and sadden the student of nature.

The above mentioned nest was a very neat affair made of grass, lined with root-fibers, and placed in a shallow depression in the soil. A tuft of coarse grass bent over it from above; and another was growing on its lower, or downhill, side.

The song of the Lark Sparrow, which may be heard throughout the spring and summer, is highly pleasing. The bird usually arrives from the south the first week in May and becomes common immediately.

If Harris Sparrows (*Zonotrichia querula*) ever visited my place of residence at Medicine Root it was never my good fortune to meet with any of them. But at Lake Creek, in a flat and almost treeless region, three of them, two males and a female, stayed about my stable for two weeks or more in late April and early May, 1908. The ordinary call note of Harris Sparrow brings to mind the melancholy sound made by an unoiled hinge that supports a door or gate swinging to and fro in the wind. When these birds were perched on the fence-posts or buildings in company with a number of English Sparrows it was difficult to distinguish which birds were which unless one approached very near to them, as the head and throat markings of the two birds are somewhat similar.

Very seldom did the Lark Bunting (*Calamospiza melanocorys*) visit my dooryard; however, when riding over the prairies one is sure often to meet with these birds. In 1904 I saw two males on May 14, and a large flock, consisting of about equal numbers of the sexes, on May 19; from this latter date they were common. But marshland and meadows are their proper habitat, and to such places we must hie in order to find them in abundance. Along Lake Creek they appear when Maia, the goddess of the plains, first makes her magic influence felt, and they become common about May 11; hence their vernal hegira in 1904 was somewhat delayed. In the hill country where the Bobolink is seldom seen the Buntings are often called "Bobolinks," because of the similarity in the coloration of the breed-

ing plumage that obtains between the male Robert of Lincoln and the male Bunting. Every ranchman in the flat country can tell you how the "blackbird with the white wings," as he calls the Lark Bunting, soars and sings ecstatically above the spot where the female bird is concealed in the grass.

In the year 1904, on April 13, there came to the stacks a Bronzed Grackle (*Quiscalus quiscula arvens*); on April 27 I saw a small flock of Brewer Blackbirds (*Euphagus cyanocephalus*) at the same place, and thence during the spring both kinds passed much time in the barnyard, often commingling in flocks. Unobserved by the birds, I often watched them from the stable while they devoured grains of oats that had shelled out upon the ground. Never is contentment more plainly expressed than in the actions of a flock of blackbirds upon their feeding-ground, and to contemplate them is good for the soul. The "cre-eak" of the "rusty hinge" is full of good cheer, as also is the "chuck" of the lesser bird.

I have whiled away much time in watching the courtship of the Brewer Blackbird. Once, while I was at work in the garden, several female blackbirds made their appearance, being soon joined by a number of males. These latter, each, for the most part, having selected his mate, proceeded to make love—ruffled their feathers and expanded their tails and wings, at the same time uttering a sound that partook equally of a rattle and a ring. Sometimes the females replied, but their antics and voices were far feebler than those of their lovers; apparently they were much more interested in searching for larvæ than in the doings of the males. As they walked about over the freshly turned earth, each favored one was closely attended by her suitor. Bachelor and maiden birds came and went, fancy free, but in every instance these had the good taste not to molest the love-makers. Thus it went on until I grew tired of watching them. He who has noted the vast amount of time and energy consumed by birds—and other animals—in their courtship must needs admit the reasonableness of the theory of sexual selection.

Comes the springtime with its hosts of flying insects, and darting from the fence posts in pursuit thereof are soon seen the remarkable tyrant flycatcher. About my Dakota home both the common Kingbird (*Tyrannus tyrannus*) and the Arkansas Flycatcher (*Tyrannus verticalis*) were often met with. In the spring of 1902 the Kingbird appeared on May 23, and became common immediately. In 1903, several of the birds were seen on May 15, and the species was in evidence from that date. In 1904, the first Kingbird as recorded by me was noted on May 8, but the birds, though one or more were seen nearly every day from the date of their first appearance, did not show their normal abundance until May 20. My meager records touching these birds seem to indicate that the Arkansas Flycatchers arrive in that region a few days in advance of the Kingbirds, that they are not so sensitive to cold as their congeners, and that some of them, at least, tarry with us much later in autumn than the common species.

The habits of these two tyrants, of necessity, are much the same, but their appearance is dissimilar. I used often to pass an old elm with a large dead limb at its summit, and many times I saw perched thereon, side by side, a single representative of either species. They often "hunt" together, and appear to be on good terms always, as though recognizing their kinship.

Because he gave them wire fences to serve as lines of perches wherefrom to sally out upon their insect prey, these birds no doubt owe much to man. One would think, too, that they would prefer the posts as points of observation, as these most resemble the dead limbs and snags of trees that nature first gave them for this purpose, but as a rule they perch upon the wires instead.

After cold and prolonged rains in summer when the insects on which they

feed are not flying well, I have noticed both these flycatchers winging their way round and round over meadows and garden patches in their efforts to stir up the wherewith for a meal. While thus engaged they remind me of the swallows that often skim about among them, though these, of course, are much more graceful in their gliding flight than are the flycatchers.

I stated that the two flycatchers are friendly to each other, but nevertheless there is sometimes a spirited rivalry between them. Once at Grass Creek, South Dakota, I saw a common Kingbird and an Arkansas Flycatcher contending for the possession of a large moth that was doing its utmost to escape them by a zigzag flight. Both birds would dash at the insect and then at each other. The Kingbird at length was successful in securing the quarry, and thereupon alighted upon a wire fence with his prey, while the other bird flew away. The victor was proceeding to pluck the wings off the unfortunate moth, when it got away, and fluttered down into some long grass. The bird hovered over the place where it had disappeared, uttering a piercing "peet, peet"; but becoming alarmed at an ill-timed movement on my part he gave up the search and flew to a clump of trees hard by.

When all was quiet, in the proper season, generally speaking, from mid-April to late in September or after, stragglers often being encountered much beyond the average autumn limit, sometimes the Mourning Doves came timidly into the yard. Their preference, however, is for the dusty trails and the old fields abandoned to waste and weeds by the Indians. At Grass Creek I found them nesting in large numbers throughout the month of June, 1905. None of the nests that I found were situated upon the ground.

The Horned Larks (probably at certain times including two or more subspecies or races) during snowstorms when the problem of existence for them must be complex, congregate where the ground has been swept bare by the wind in its eddying round buildings. At this time of the year the Sioux Indians sometimes shoot them with pointless arrows and use them for food, while in far off Utah the Utes catch them by means of horse-hair snares. Preceding storms or other marked meteorological changes, they are wont to gather together in much larger flocks than ordinarily, and upon such occasions their restless and excited manner of twittering and scurrying is certain to attract attention. In May and June the young birds, unable to fly well or at all, are frequently crushed by the feet of horses and cattle, or the wheels of vehicles. Once, in winter, I witnessed the attempts of a pair of hungry coyotes to capture Horned Larks by stalking them. But they were unsuccessful, as the birds were on their guard, as they must needs always be, and made short flights whenever the canines drew uncomfortably near.

The Yellow-billed Cuckoo (*Coccyzus americanus*) often arrives in those parts as early as May 22. Ever since I first came to know this bird in Illinois, many years ago, as the "rain-crow," he has greatly interested and delighted me. In 1905, it was on May 23 that I saw the first Cuckoo of the season at Grass Creek, South Dakota. He was flitting silently about among the trees that stood at the foot of a low bluff when first I spied him. Leaving him sitting on a willow branch, I hurried to the house, twenty rods distant or so, to procure my field-glasses. When I came back, there he sat on the selfsame branch and paid but little heed to my movements. I viewed him for some time, and as I approached a little too near, according to his view-point, he merely hopped to another perch a few feet away. There is something of Old World mystery, somewhat monkish and medieval, about this bird, with his sidling, shy behavior, his exclusive ways. I walked down the creek, forty rods or so, and returned in about a quarter of an hour. Still he sat there, lost in reverie, his back to the sun and wind. And thus I left him.

English Sparrows (*Passer domesticus*) in spite of their commonness, their rank hoodlumism, their ceaseless clamor, and their strenuous antipathy to the presence of more welcome birds—in their relation to the economy of nature afford a subject well worthy of study. During the winter of 1902-1903 there were none of these birds about my premises. In 1903 a flock suddenly appeared late in October, and spent the remainder of the fall and all winter with me. Often I met with some of the members of this flock along the creek among the trees, where their impudent chirps seemed strangely and strongly incongruous. When we reflect upon their prompt and confident manner of taking possession of new territory, as here illustrated, we can easily understand how it is that these birds, since the fifties, have been enabled to overrun our country so largely. We can see that although the fittest in nature must survive, yet the fittest of nature's plan are not always those that appeal to our sympathies as being the best. The bluebird is continually being driven from the neighborhood of our houses by the noisy and bellicose sparrows. Now, what being in the realm of nature, in a higher sense, is "fitter" to enjoy the best in life than is that emblem of innocence and purity, that "bit of blue sky," the bluebird? Yet the fittest of the biologist is the organism that is able to cope best with its surroundings; and where can we find a better example of such a being than is the English Sparrow? How and why, it has succeeded so well, is thus pointed out by Coues: "This species, of all birds, naturally attaches itself most closely to man, and easily modifies its habits to suit such artificial surroundings; this ready yielding to conditions of environment, and profiting by them, makes it one of the creatures best fitted to survive in the struggle for existence under whatever conditions man may afford or enforce; hence it wins in every competition with native birds, and in this country has as yet developed no counteracting influences to restore a disturbed balance of forces, nor any check whatever upon its limitless increase."

I do not recall ever having seen a House Wren (*Troglodytes aedon parkmani*) at my stamping ground on Medicine Root, but at Grass Creek they were very abundant. At the former station the number of large trees is not great, while at the latter place there are many good-sized willows and elms having numerous hollows and knot-holes, and perhaps it is for this reason that there are innumerable wrens at Grass Creek, but I do not know. They become common about the second week in May.

"Music hath charms" is a saying trite but true. The charm about the song of our Dakota wren, however, resides not altogether in the music of it. When the ditty falls upon our ears the associative faculties straightway bring up mental pictures of other scenes and sounds. In the wilds of Dakota, with Indians roaming here and there, with the Bad Lands blazing in the sun, and with a strange sky overhead, close your eyes and hearken to the singing of the wren. Immediately fond remembrance brings back the surroundings of your boyhood days in Illinois, the cool, moist groves of maples, and the little House Wren pausing to warble joyously during the intervals of its labor of collecting larvæ for the hungry brood.

Brown Thrashers (*Toxostoma rufum*) were more numerous at Grass Creek than at Medicine Root. During the few years throughout which I studied them in Dakota, they became common at any time from May 3 to May 17, and after mid-September they were seen no more. A pair of thrashers that had built their nest in a bush not far from the dwelling house used to visit my cord-wood pile for borers to feed to their nestlings. Once when I approached the nest, the mother bird, who was on the point of giving one of these larvæ to her young, swallowed the insect herself in order that she might the better scold me. I estimated that

the thrashers at Grass Creek were more numerous in 1906 than during the previous year.

The first occasion upon which I had the pleasure of observing the Snowflake (*Plectrophenax nivalis*) in that region was in the fall of 1903. I was standing on the summit of a lofty hill when on a cairn I saw the bird, for there was but one. I approached very near, and thus was enabled to study his coloration and general make-up, and to determine his kind. On my drawing too close, however, he would fly away with a "pur-r-r," but always came back to the self-same cairn.

In winter the Snowflakes fly in flocks before the traveler's horses as the Horned Larks do, except that in taking flight they "rise as one man." They seldom come to the vicinity of dwellings, but in February, 1904, I saw one lone bird of this species in my garden plot, where I had thrown a quantity of kitchen refuse on the snow. When the hens appeared the bird uttered a scolding note and flew to a post. I have no record of the comings and goings of the Snowflake.

In the middle of May—a time beloved of a myriad of birds—the Western Yellowthroat (*Geothlypis trichas occidentalis*) arrives in southwestern South Dakota. If your home is on a table-land, however, you may count upon seeing or hearing but little of this the most familiar of the warblers. But on Lake Creek, an indirect tributary of Big White River, the Yellowthroats were present by the hundreds. Here grow clumps and clumps of dwarf willows and bastard indigo, traveling over the miry meadows, or seeming to travel, for continuity suggests motion, and on their arrival at the brink of the creek approaching as near the water's edge as they can secure a foothold, or roothold, rather, and then extending their wand-like branches out over the surface of the stream as far as these will reach. Such places are a paradise for the yellowthroat. From the time of his arrival in the springtime, through all the summer, you can hear his joyous "witchety, witchety, witchety," from far and near. And he does not fear to leave the marshes, either. There are dozens of his kind among the weeds that flourish luxuriantly upon the flat meadows reclaimed by Mother Nature from ancient marsh-land. And in the miniature herbaceous forests about your very doors you will find the bird and his mate in pursuit of their insect quarry.

The Barn and the Cliff Swallows (*Hirundo erythrogastra* and *Petrochelidon lunifrons*, respectively), in regions where the Bad Land formations and the limestone bluffs occur, find sites in plenty that are suitable for nidification purposes. But in the marsh and sand-hill country the former are obliged to build their nests in sheds, and the latter to construct theirs under the eaves of buildings. At Lake Creek, despite all my efforts to prevent their doing so, the English Sparrows enlarged the openings to the cliff swallows' nests and evicted the rightful house-holders, after which they themselves took up their abode therein. Barn Swallows depart on September 26, or before, but as late as September 15, in 1906, I found in a nest within a shed, three young birds of this species that were just able to fly when I routed them therefrom. I saw no old birds about at the time, and what afterwards befell the young ones, I did not learn.

In summer, when one is traveling over the prairies, especially during a rain, barn swallows frequently circle about close to the horses in pursuit of the flies that accompany these animals, and on more than one occasion I have seen the birds dart after specks of flying mud that they mistook for insects on the wing. At a given date in spring or fall, a person may conclude that there are no swallows about, and then, when traveling over the hill-country, suddenly come upon a number of them circling round in some sequestered swale or valley. These birds seem to practise frequently this trick of going off by themselves into sunny nooks, and

hence it is not so very strange that we oftentimes hear of folk who believe that swallows hibernate in mud at the bottom of ponds, and that on pleasant days the sun warms them into life and renewed activity.

Only once was the Purple Martin seen by me in that country. This was on June 11, 1904, when a pair of these birds, accompanied by some Cliff Swallows that were always hanging around, stopped to rest for a while upon the clothesline in my dooryard at Medicine Root. To my regret, they moved on and were seen no more.

Other rare bird occurrences came to my notice on Pine Ridge reservation. I saw a male Crimson-headed Tanager (*Piranga ludoviciana*) near Grass Creek on June 3, 1905. Three Western Blue Grosbeaks (*Guiraca caerulea lazula*), all males, tarried about my station in the valley of that creek for several days late in May of the same year. In that vicinity, also, a White-winged Crossbill was seen on a single occasion the following winter. A flock of about twenty common Redpoll Linnets (*Acanthis linaria*) alighted on a tree at Medicine Root in February, 1904. They were most ridiculously tame, and did not take flight until I, whose marksmanship is certainly nothing to boast of, had approached so near as to be able to decapitate one of the birds with a bullet from a twenty-two caliber rifle. The linnets then flew away, uttering a note somewhat resembling that of the American Goldfinch.

Interesting though they are, cases of rare aves that are seen once or a few times in a particular region as mere stragglers, do not compare in importance with instances of the gradual increase in numbers of uncommon birds throughout a given territory. Take the Black-throated Bunting, or Dickcissel (*Spiza americana*), for example. This is a bird whose kind haunt every hedge-row in Illinois. When a boy I knew the bird well, and early learned his name through the medium of one of a set of picture-cards advertising a particular brand of saleratus! On one of these cards was the likeness of the dickcissel, reproduced from an illustration in some standard book on ornithology. But in his habitat in Illinois, he was not, I must admit, of especial interest to me. This no doubt was because he there appeared a fixed feature of the ordinary, unchangeable run of Nature's everyday affairs. In that district of Dakota where I so long sojourned, however, I saw the bird in a different character—as soon as I saw him there at all! For he exemplified the gradual advance of a species into territory aforesaid unoccupied by it.

The points where I was stationed in South Dakota were all on the Pine Ridge Indian reservation, a tract of country about one hundred miles long and sixty miles wide. During the almost three years, from October, 1901, to July, 1904, when I was located at Medicine Root Creek, I traveled about, as usual, over the reservation a great deal. Nevertheless, on no occasion throughout this period did I see, or hear of, a Black-throated Bunting. I left the reservation in July, 1904, and returned in April, 1905, taking up my abode on Grass Creek, about forty miles west of my former station. Here, on July 9, 1905, among some rose bushes in a branch of the main creek-valley, I saw a male Black-throated Bunting. This, the first of the species recorded by me up to that time, was also the only one seen that season. But the next summer, that of 1906, I saw, beginning June 13, a number of these birds on Wounded Knee creek, five or six miles from the spot where the solitary bunting of 1905 was found. In July, 1907, when I crossed Wounded Knee, there were some of the birds at the same place, and, I estimated, in increased numbers. I visited Medicine Root, also, when on the same trip, and not far from the mouth of that stream, on a level tract, I perceived a number of buntings. At Lake Creek, in 1907, on June 13—mark the date!—they suddenly appeared in considerable force, and became immediately common. The character of the bird-music

of that valley was thus abruptly changed, for amid the songs of the Meadowlarks, Red-wings, Lark Buntings, and Bobolinks, the "chip, chip, chee! chee! chee!" of the Black-throats was very noticeable. About two weeks after the above date I found a bunting's nest containing four eggs. The next year, also, they came to Lake Creek in June, and without any doubt, too, they must have returned to their haunts at the other points where I had found them on previous occasions. I think that these various records are sufficient to establish for the Black-throated Bunting, or Dickcissel, the right to be called a member of the avifauna of Pine Ridge reservation.

Were it not for the parasitic habits of the Cowbird (*Molothrus ater*: literally, "black vagabond," an appropriate name), one might doubtless take a liking to him. It is a well-known fact that the female cowbirds clandestinely deposit their eggs in the nests of other, and usually smaller, kinds of birds, and that in most instances the young Cowbirds who in due time arrive are well-cared for by the dupes of foster parents, generally to the neglect of their legitimate offspring. Cowbirds are often seen following grazing cattle and horses, and engaged in capturing the insects that are attracted to these animals, whence comes the common name of the bird. But though they accompany roving cattle and were formerly followers of the herds of buffaloes, as the "old timers" tell us, I have seen them follow the plow also. One spring, when a tract of virgin prairie was being broken up, a flock of about twenty Cowbirds, male and female, were on hand, and devoured great numbers of the grubs of May-beetles which abounded among the grass roots.

Where I first knew them in Illinois, northwest of the state center, the Cowbirds arrived early in April, as a rule. In Dakota they appeared from three to four weeks later than this, and departed some time before the middle of October. In the summers of 1907 and 1908, respectively, I observed that they were very abundant throughout the lowlands of Lake Creek and in adjacent regions.

Through sight or sound I was continually apprised of the proximity of many birds that seldom, or never, actually stopped on the grounds. In the evenings the Nighthawks (*Chordeiles virginianus*) sailed overhead, and their sharp and penetrating "spe-eak!" or, at times, their startling "boom!" could be heard on every hand. These birds attain their normal abundance in those parts from late in May to June 2. In 1904, they suddenly appeared in large numbers over many square miles of territory on May 21, and were frequent from that date. By mid-September they are off for the south.

Frequently, and especially in the evenings during falling or threatening weather, the shrill vociferations of the Killdeers (*Oxyechus vociferus*) resound on all sides. Indeed, when an area of low barometer is upon us, presaging storms, I believe that this plover can "feel it in his bones" as early and unmistakably as can the most rheumatic of old men. These attractive birds usually arrive late in March and are common on April 1. Thus it was, also, when I observed them in north-eastern Utah in the spring of 1901.

Sometimes from the top of a pine a Chewink (*Pipilo maculatus arcticus*) gave utterance to his song, and when the wind was favorable the ditty could plainly be heard at the house. The Chewinks are here in numbers by May 6, or sooner, and it is only when the first third, or sometimes half, of October is gone, that they no longer people the groves and copses. I have seen stragglers at various times throughout the winter, however, and have come to the conclusion that when suitable shelter is at hand and the cold season not too severe, individual representatives of the species may occasionally remain during the entire year in many localities.

Within the dank woodland in the abrupt Medicine Root valley, and at no other

point where I resided in the Dakota country, the crescendo chant of the Oven-bird (*Seiurus aurocapillus*) was heard in spring and summer, and on two occasions I found the nest of this species.

When the night falls, and near the water the frogs sing and croak; when the slight breezes cause the pines to sigh; when, like ghouls, the coyotes yelp and wail amid the moon-kissed hills, whereon, exposed to sunshine and to rain, rest the rude coffins of the Sioux—then the sound that, above all others, arrests the attention, is the succession of curious utterances of the Long-tailed Chats (*Icteria virens longicauda*) in the undergrowth along the creek. Day and night for a considerable period after the middle of May, I could hear them, and when I first witnessed the actions of the male as he mounted high in the air, and then descended in a series of short, jerky flights, I realized the appropriateness of one of his common names—clown. And no mountebank ever was more gaily attired than he.

Red-headed Woodpeckers, while not remarkably abundant, were common enough among the trees near the water-courses from May 20 to the middle of September, and ever and anon, one or two could be seen working away at a post, or sitting on the ridge-board of a building. Or again, especially in the autumn, the young and old spent much time together engaged in flycatching. This, by the way, has become a very common trait of these birds. While I do not venture to prophesy, yet it may be said that from such small beginnings as this occasional recreation, marked changes in habit or structure often take their rise. Just at present it would be hard to believe that these birds might sometime be driven by natural selection to take regularly to this method of obtaining insect food. Still, should timber become exceedingly scarce, such a result might follow. Moreover I believe that at the present day, even, use and habit may be effecting slight changes in the Red-head's ways of life. The habit of flycatching, which is indulged in by all the species of *Melanerpes*, the genus to which this bird belongs, is no doubt inherited; and it would be strange indeed if continued use of the muscles called upon did not strengthen and modify them, as well as enable the bird to attain skill in their exercise; and these acquirements would be transmitted to the progeny. Then, should the kinds of trees become scarce wherefrom the woodpeckers are wont to search out their food, it is possible to believe that natural selection would preserve those birds that were best enabled to make a living by following the Kingbird's trade, and that in a few thousand generations it would be difficult indeed for the shade of Audubon, on beholding the modified descendant of *Melanerpes*, to tell what manner of bird was before him!

It is more than probable that the genus to which the common Flicker belongs was in remote times nearer than now to the typical woodpeckers, which lead a strictly arboreal life; and glancing from them to him we see the changes that have been wrought. Natural selection has operated upon the coloration of the Flicker's upper parts and rendered them protective to the owner in that they make him inconspicuous as he "hunts bugs" upon the ground, and directive to his companions as he rises therefrom in flight. Moreover, the same agency, assisted by use and wont, has effected other modifications. And why, in the light of these facts, should it be impossible to accept the view that the Red-head, also, may one day become altered in form and habit? But all such changes ultimately depend upon modifications in the environment; unless these occur the organism remains unaltered.

I think it was when severe storms swept over the plains, driving the birds to the vicinity of the buildings and haystacks that I felt for and with them most.

Here is an account, published by me in *Bird-Lore*, vol. VIII, of a May snowstorm and its effects upon the bird-life of the region where it occurred:

"The following notes relate to observations made at Grass Creek, Pine Ridge Reservation, South Dakota. On May 3, 1905, a cold rain prevailed all day, coming from the north. In the evening the rain-storm changed to a snow-storm, which continued all night, all the next day, and into the succeeding night. It was practically a blizzard. Western Lark Sparrows had arrived on May 1, and the storm rendered them very uncomfortable, to say the least. They huddled close to the south sides of the buildings, seeking shelter, and looking for food where the ground was bare. I threw out crumbs of bread to them, many of which they picked up. They slept under the door-steps and in a stable well sheltered by a hill, as well as in spaces among cord-wood in the wood-pile.

"The Horned Larks did not appear to mind the storm greatly, at first, but ultimately they began to flock with the Lark Sparrows. They did not, however, so far as I could ascertain, eat any of the crumbs that I had thrown out. But the cold had made these birds, as well as the sparrows, almost fearless of me.

"A White-rumped Shrike had killed a lark and thrown the body over a wire on the fence, thus enabling him to hold it easily. He was eating the decapitated carcass, and returned to it after I had frightened him off.

"When the snow had nearly disappeared I saw a large number of the sparrows and larks feeding together. A shrike flew over them, a few feet above the ground. The larks nearly all took alarm and flew away, but the sparrows fed on unconcernedly with the few larks that remained.

"The flocks of blackbirds that had previously been with us disappeared while the blizzard was in progress and did not return until it had cleared; but a single Bronzed Grackle, accompanied by a male cowbird, sought at times for food about our doors, during the storm.

"The morning after the storm had ended I saw a Say's Pewee at one of the windows of the house in chase of a fly that was on the outside; and afterwards I saw him trying to secure one or two of these insects that were on the glass within doors. When the storm was raging I had seen him upon the ground, searching for food as ordinary ground-dwellers do."

Say Pewees (*Sayornis sayus*), by the by, are often apt to receive their full measure of winter and rough weather, as they usually arrive in spring at the commencement of the third decade of April, or sometimes sooner, and individuals have been known to tarry until near the end of September.

At Lake Creek, Mallards (*Anas platyrhynchos*), Pintails (*Dafila acuta*), Canada Geese (*Branta canadensis*), and Snow Geese (*Chen hyperboreus*) often winged their way through the air overhead. Various sandpipers, during rainy spells, frequently ventured into the dooryard at that place; the most familiar of these were the Least (*Pisobia minutilla*) and the Baird Sandpiper (*Pisobia bairdi*), and the Upland "Plover" (*Bartramia longicauda*). Curlews (*Numenius americanus*), oftentimes whistled in the meadows. Sandhill Cranes (*Grus mexicana*) flushed from the swamps, floated in the sky like boys' kites, sometimes spending hours in the air before venturing to earth again. Indeed, some persecuted birds must of necessity believe that the earth is no place for them at all. The Great Blue Heron (*Ardea herodias*), too, was met with now and again, and the Bittern (*Botaurus lentiginosus*) could be heard "pumping in the fens." More than this, he frequently approached very close to the houses on the marsh. When winter reigned, the Short-eared Owl (*Asio flammeus*) and the Marsh Hawk (*Circus hudsonius*), a-mousing in the meadows, were an essential part of the snowy landscape.

Bobwhites (*Colinus virginianus*), introduced by man, were not infrequent at Medicine Root and Grass Creek, while at Lake Creek there was one small bevy, which, when alarmed, took refuge under a ranchman's dwelling house! In that region, too, if the statements of the settlers are correct, the Pinnated Grouse (*Tympanuchus americanus*) is increasing in numbers and forcing the Sharp-tailed Grouse (*Pedioecetes phasianellus*) out of the valley. In the highland country, however, where I dwelt also, only the latter species is to be found.

Downy (*Dryobates pubescens medianus*) and Hairy (*Dryobates villosus*) Woodpeckers were resident where trees abounded, but did not come to the buildings. Blue jays (*Cyanocitta cristata*) now becoming more numerous with each returning year, often stopped at the door. The Orchard (*Icterus spurius*) and the Bullock Orioles (*Icterus bullocki*) hung their pendent nests in the great cottonwoods that stand isolated on the meadows of Grass Creek; and at the house on the hill there and at Medicine Root the charming lay of the Black-headed Grosbeak (*Zamelodia melanocephala*) was wafted to the ear from the groves below.

Then, too, the notes of migrating Arctic Bluebirds (*Sialia currucoides*) greeted us from overhead, and numberless warblers and greenlets enlivened the thickets as, in their pilgrimages, they followed the north and south streams. But to enumerate all my bird acquaintances in that pleasant land, would, in itself, prove a task; therefore I will not prolong the list. Perhaps they came flying to the grounds—perhaps their notes were zephyr-borne from the trees below; in what way soever they made themselves known, these feathered companions were an un-failing source of pleasure and instruction.

A NESTING COLONY OF HEERMANN GULLS AND BREWSTER BOOBIES

By JOHN E. THAYER

WITH THREE PHOTOS

IN the spring of 1909 I sent my collector, Mr. Wilmot W. Brown, Jr., to the islands off the coast of southern Lower California in the hopes that he would find the nesting place of the Heermann Gull (*Larus heermanni*). After a long and weary search on the different islands, he found a large breeding colony on the southeastern end of the Island of Idelfonso. This was March 28. After waiting a few days, so that the birds would have full sets, he collected a very large series. With a few exceptions most of the nests contained two eggs; some twenty or thirty had three.

Mr. Brown says: "The nest in all cases was simply a well formed depression in the ground with no lining whatsoever. There must have been over fifteen thousand Heermann Gulls nesting on this island.

"On the southeastern end of the island, facing the sea, there is a large semi-circular shaped depression, which covers about five acres. It is quite level on the bottom and covered with gravel, with here and there blocks of lava scattered about. (See fig. 35.) It is well protected from the northwest wind, which prevails here in March and April. At the time I arrived on the island immense numbers of these gulls had congregated. They literally covered the ground. They were so



Fig. 34. NESTING COLONY OF HEERMANN GULLS, IDLEFONSO ISLAND, LOWER CALIFORNIA; MARCH 23, 1909

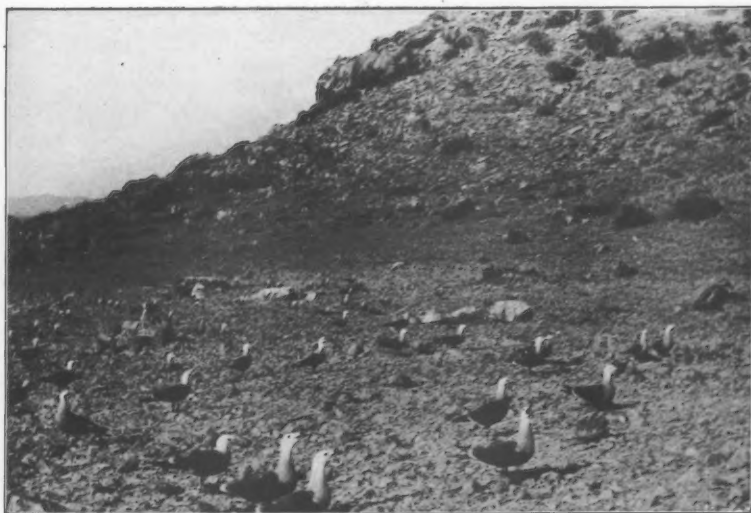


Fig. 35. PORTION OF COLONY OF HEERMANN GULLS; APRIL 8, 1909. AT THIS TIME THERE WERE ABOUT 2500 NESTS IN THE COLONY

occupied in their love-making that they paid very little attention to us. Their cries deadened the cries of all the other birds and they kept it up all through the night.

"In the waters close to the breeding ground large flocks were seen. When I first arrived, March 24, there were an immense number of birds. The males were constantly seen fluttering over the females on the ground, near their nests; but no eggs were laid until April 2. It seems they spend some time in courtship before settling down to their matrimonial duties. The female when in passion emits a peculiar squeaky sound as she coaxes the male by squatting down and going through the most ludicrous motions. I have also seen a pair holding on to each other's bills, a kind of tug-of-war affair; then they would back away and go through a suggestion of a dance, but all the time talking to each other in low love tones.



Fig. 36. A FAMILY OF BREWSTER BOOBIES, BOTH PARENT BIRDS, AND ONE YOUNG ONE IN THE NATAL DOWN. THE NEST IS IN A CREVICE NEAR THE TOP OF A CLIFF

The appearance of a Duck Hawk would send them all flying to sea. They would return however very quickly.

"On the southern end of the island there was a colony of Brewster Boobies (*Sula brewsteri*). They were nesting in the cliffs and caves and in the openings among the rocks (see fig. 36). The nest was composed of a few sticks, in most instances whitened with guano, and on this one egg was laid. I never found a nest with two eggs. I found many nest with one young. I also saw full grown young on the wing, which would indicate that they must begin to nest in January."

Mr. Brown also found breeding on this island the Blue-footed Booby (*Sula nebouxi*), the Craveri Murrelet (*Brachyramphus craverii*) and the Rock Wren (*Salpinctes obsoletus obsoletus*).

FROM FIELD AND STUDY

Remarks on the Food of Young Cowbirds.—To the writer the speculation has been interesting as to whether young Cowbirds must make shift to live and grow on diets varying widely according to the foster parents. An effort has been made to collect material bearing on the problem, but with little success. The vicinity of Washington is a poor place for Cowbirds. However 14 stomachs from other localities have been examined. The distribution among foster parents is as follows: *Icterus galbula* 1, *Poocetes gramineus* 2, *Melospiza melodia* 5, *Vireosylva olivacea* 2, *Vireosylva gilva* 1, *Dendroica aestiva* 2, and *Geothlypis trichas* 1.

On the whole the evidence is very plain that these species give to the young cowbirds the normal diet for their own nestlings. For instance the Vesper Sparrows were the only birds to feed the terrestrial cutworms; but this is a very natural thing for these ground loving birds to do. Only Song Sparrows fed carabid beetles, and weevils, and more than a trace of seeds. This diet agrees with that described for the sparrows by Judd.¹ Moreover three of the Cowbirds fed by Song Sparrows had a bunch of vegetable fibers in their stomachs and were the only nestlings so favored. The Yellowthroat and Song Sparrow were the only ones to feed snails. The diet of the nestlings fed by the Red-eyed Vireo agrees with previous records for this bird in the inclusion of tree-living homoptera. The youngsters foisted upon Yellow Warblers were the only ones treated to moths, an item known to be given to the nestlings of other warblers.

These records show the adaptability of Cowbirds, a characteristic which must receive a severe test in certain cases. For instance the horned larks and various species of blackbirds and sparrows, habitually feed seeds and hard insects to their young. The Rose-breasted Grosbeak uses the "nasty" potato beetle for baby food; and the Cedarbird uses a large proportion of fruit. Perhaps the greatest departure from the average nestling diet among the species parasitized by Cowbirds is in the case of the Turtle Dove. This bird feeds its young entirely on vegetable matter, some of it half-digested, and mixed with a secretion of the crop, being the substance called pigeon's milk. It would be of great interest to know whether cowbirds are ever reared on this pabulum.

Samuels remarks that "This bird although subsisting principally on various seeds and small fruits, destroys great numbers of insects, particularly in the breeding season; in fact its young are fed entirely on insects and their larvæ, and the well known wire-worms."² It has justly been observed before that the credit for choice of insects consumed by young Cowbirds belongs strictly to the foster parents. Considering the food of adult Cowbirds alone the balance is in favor of the species. But when we reflect that each Cowbird brought to maturity is the cause of the death of three or four birds which would have been just as beneficial in the nestling stage, and probably more so in later life, the right of the Cowbird to protection can well be questioned.—W. L. MCATEE.

Notes on a Broken Leg in the White-rumped Shrike.—My friend, Dr. G. E. French, has called my attention to a peculiarly healed broken leg of a female White-rumped Shrike (*Lanius ludovicianus excubitorides*), which he had collected on February 18, 1911, for mounting.

The tibio-tarsus and fibula of the right leg had been broken squarely off about three-eighths of an inch above the distal end, as is shown in figs. I, II and III. The activity of the bird very evidently had prevented a union of the broken ends, which were separated a sixteenth of an inch, but which had finally been bridged together by two very strong bone arches. As healed, the lower end of the tibio-tarsus had a marked lateral bend, but not enough to attract attention before dissection. The muscles of the lower leg were well developed, which would indicate that the shrike had recovered good use of its foot.

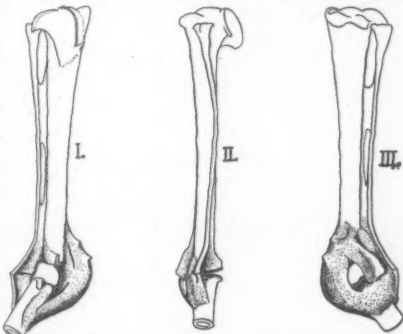


Fig. I is a view of the anterior surface, fig. II a view of the right lateral surface, and fig. III a view of the posterior surface.—CLARENCE HAMILTON KENNEDY.

¹ Yearbook, U. S. Dept. Agr. [1900] 1901, pp. 419-422.

² Samuels, E. A., U. S. Agric. Rep. [1864] 1865, p. 426.

The Catbird in Southern Idaho.—On August 1, 1909, while prowling along a thick fringe of scrub willow, beside a lagoon-like pond on the Boise river bottoms, I started the only catbird (*Dumetella carolinensis*) I have seen this side of the Rocky Mountains. At the time I did not think the occurrence specially worthy of note, as I was then new to this section; but having explored this same thicket and others of a similar sort and in similar location, many times since, without results, I have concluded the species is rare, in this section at least.—L. E. WYMAN.

A Nesting Incident of the Brewer Blackbird (*Euphagus cyanocephalus*).—In July, 1909, having occasion to burn a pile of brush in the road near my residence, I removed therefrom a nest of this bird, with three eggs, and fastened the same in a crotch of a small black locust about twenty-five feet distant. The next morning I was surprised to see the mother bird on the nest in its new location, brooding as though nothing had happened, and in due time two young appeared, though the family cat prevented their reaching maturity.—L. E. WYMAN.

The Virginia Rail at Helena, Montana, in Winter.—On February 22, 1911, I secured an adult male Virginia Rail (*Rallus virginianus*) near Helena, Montana. The bird was one of three that were found in a willow swamp where warm springs keep the waters open all winter. The birds were feeding about the edges of these springs. The one shot was in good condition and there is every reason to believe that all of them had remained there throughout the winter. Two other species by no means common in winter in Montana, but seen in the same vicinity at the same time, are the Western Meadowlark and Wilson Snipe.—ARETAS A. SAUNDERS.

Occurrence of the Red Crossbill (*Loxia curvirostra minor*) in Southern Idaho.—While this bird should be, and probably is, common, or at least not rare, among the conifers of the mountains, it apparently seldom strays into this section of the Boise Valley. Last October I saw a small flock of birds passing overhead and heard the familiar note of the Crossbill. The flock alighted in a Lombardy poplar and a shot brought down a Crossbill and a House Finch. As nearly as I could determine without glasses, the Crossbill was the only bird of its species in the flock, the rest being House Finches (*Carpodacus mexicanus frontalis*).—L. E. WYMAN.

The Yellow Rail in Southern California.—A Yellow Rail (*Coturnicops noveboracensis*), male, no. 2077, coll. of P. I. O., was received from Mr. Evan Davis of Los Angeles. The specimen was collected at Newport Bay, California, on December 12, 1896, by Mr. J. H. Henderson. Are there other records for this vicinity?—PINGREE I. OSBURN.

Some August Notes for Lake Valley.—I spent most of August, 1906, at Lake Valley, which lies at the southern end of Lake Tahoe. This being my first visit at so late a date, a comparison with the Valley's bird life in May and June may be of interest. While advancing summer finds certain birds ascending to still higher altitudes, on the other hand some species, or rather individuals, having reared their young in high altitudes, now descend to lower levels. In May and June at Bijou, such birds as the Pine Siskin (*Spinus pinus pinus*), Olive-sided Flycatcher (*Nuttallornis borealis*), Slender-billed Nuthatch (*Sitta carolinensis aculeata*), Williamson Sapsucker (*Sphyrapicus thyroideus*) and Clarke Nutcracker (*Nucifraga columbiana*) are either scarce or wanting; in August, however, I found these not uncommon and collected examples of all of them in the immediate vicinity of Bijou.

Green-tailed Towhees (*Oreospiza chlorura*), while scarce in the breeding season at Bijou, although nesting commonly in certain localities adjacent, were in August one of the most common birds, being found in large numbers along the now dry meadowlands in company with the Sierra Junco (*Junco hyemalis thurberi*).

In general birdlife, being increased by the young of the year, was more abundant than earlier. These conditions did not obtain at the Rowland's Marsh at Al-Tahoe, however, where the defection was very marked. Here we found almost the entire summer congregation absent. Of its usual quota of thousands of Yellow-headed Blackbirds (*Xanthocephalus xanthocephalus*) we observed only a single individual, an immature male; Forster Terns (*Sterna forsteri*) were entirely wanting and the very few Black Terns (*Hydrochelidon nigra surinamensis*) seen were all young of the year. In our tour of the marsh, however, we secured a new bird for the Lake Valley checklist in the Least Sandpiper (*Pisobia minutilla*). A flock of about twenty passed over our boat and we secured three specimens, all adults. Another species new for the checklist was the Sora Rail (*Porzana carolina*). We first took this bird on the Bijou Meadow on August 12; on August 27, on our trip through the Rowland's Marsh, we noted two more rails of this species. During a stay of a little over a month the writer made a collection of about fifty skins, including a few of the smaller mammals. The two birds already noted, however, were the only ones to be newly recorded for Lake Valley.—MILTON S. RAY.

The Bohemian Waxwing in Placer County, California.—The California Academy of Sciences recently received a female Bohemian Waxwing (*Bombycilla garrula*) from Dutch Flat, Placer County, California. It was sent by Mr. E. K. Carnes, Superintendent of the State Insectary, who stated that it was shot on February 26, 1911. He writes under date of March 3: "Large numbers of this species of bird have appeared in the apple orchards around the town just named and are feeding on the decaying fruit, which has been left on the ground or is still hanging on the tree."—E. W. GIFFORD.

The Egret in Southern California.—While crossing the salt marsh north of Alamitos Bay, Los Angeles County, California, 9:30 a. m., February 26, 1911, en route to Newport Beach, I saw two Egrets (*Herodias egretta*) standing in a tide pool about seventy-five yards from the Pacific Electric R. R. tracks. The passing of the car did not seem to disturb them. When returning, about 1:30 p. m., I did not see the birds.—C. B. LINTON.

The Troupial in California.—On April 30, 1911, I obtained near Santa Barbara a Troupial (*Icterus icterus*), a most beautiful male. The plumage is absolutely perfect, not a feather being frayed in either wings or tail, and the feet are in perfect condition. To me there seems no possibility that it can be a cage bird. It was in upper Mission Canyon, a very wild locality, in company with a flock of Western Tanagers that were passing through, and seemed very much at his ease. He was in fine condition, and the stomach was crammed with small green cankerworms.—J. H. BOWLES.

Bobolink at Great Altitude.—It may be of interest to note the presence at Leadville, Colorado, at an elevation of 10,150 feet, of two male Bobolinks (*Dolichonyx oryzivorus*) on the 17th day of July, 1907, a little before nine o'clock in the morning.

They were on a bunch of weeds, less than half a block east of the Public Library, and not more than twenty-five feet from me as I passed on the sidewalk. I might add that they are the only ones I have ever seen in thirty years experience in this county, which includes the principal sources of the Arkansas river.

Perhaps, when the more absorbing duties of early summer were over, they were seeking, like many another, the delightful exhilaration of a mountain trip!—J. CLARENCE HERSEY.

Unusual Nesting Site of the San Nicholas Rock Wren.—While visiting San Nicholas Island, April 14 and 15, 1911, my attention was called to a pair of these wrens (*Salpinctes obsoletus pulverius*) carrying nest material into a crack under the eaves of the store-house where the ranch provisions are kept. Both birds were seen at work at the same time. About 20 men (sheep shearers, et al.) were at work 15 to 30 feet distant, and were constantly passing and entering the store-house. The birds entered the nesting-site while I was standing within five feet of the building.—C. B. LINTON.

Field Notes From the San Joaquin Valley.—Beginning March 5 of this spring (1911) the Museum of Vertebrate Zoology of the University of California has kept a party in the San Joaquin Valley, central California, for the purpose of investigating the mammal fauna of the region. While the bulk of attention was necessarily devoted to the trapping and study of mammals, some observations were made on the birds of the region traversed. The writer of the present sketch spent about five weeks with the party between March 5 and May 5, and the following scattered information relative to the birds is selected from his note book as being thought worthy of being made accessible to the bird student in general. A few specimens were taken and comments on some of these are also added.

California Jay (*Apelocoma californica*). Of extraordinary abundance in the vicinity of Raymond, Madera County. I used to be skeptical of the notion that Jays have very much deleterious influence on the small bird life of a locality. But after witnessing a single jay despoil a Brown Towhee's nest and eggs in spite of the spirited defense put up by both owners, and after seeing another jay beating a young sparrow to death, I feel inclined to attribute the relative scarcity of small birds around Raymond to the presence of so many California Jays. The place would appear perfectly suited to a large population of gnatcatchers, bush-tits, towhees, wrens, vireos and warblers, but the expected species were either scarce or wanting. Five jays' nests each with eggs or young were encountered, although I was not hunting for birds' nests. These were in small oaks or ceanothus bushes, four to ten feet above the ground, with no apparent attempt at concealment, beyond that incidental to support and shade.

Western Grasshopper Sparrow (*Ammodramus savannarum bimaculatus*). A single specimen obtained on an alfalfa patch at Earlimart, Tulare County, April 30.

Western Savannah Sparrow (*Passerculus sandwichensis alaudinus*). Still present at Earlimart, Tulare County, up to May 4. This to my mind constitutes late tarrying of winter visitants, and in no wise indicates a breeding station. The behavior of the birds at no time was such as to lead one to suspect nesting; and a specimen shot on April 30 was just completing a partial pre-nuptial molt, being in the consequent plumage a duplicate of Alaskan specimens. It would appear quite unsafe to base breeding records of any of these migratory sparrows upon anything short of actual discovery of nests and eggs or small young.

Intermediate Sparrow (*Zonotrichia leucophrys gambeli*). Observed at various points all through April. At Earlimart, Tulare County, several were noted on the 30th. One was shot on May 1, and none were noted thereafter, thus establishing a date of departure for this season and place.

Nuttall Sparrow (*Zonotrichia leucophrys nuttalli*). A number of this form were noted in mixed flocks of sparrows in rose thickets along levees five miles northeast of Tracy, San Joaquin County, March 11. Two specimens shot were preserved, and comparison in the Museum shows them to be unquestionably of this race, thus establishing an eastward extension of the known winter range of *Z. l. nuttalli*.

Heermann Song Sparrow (*Melospiza melodia heermanni*). During the travels of myself and assistants, we kept a constant lookout for song sparrows. The result was that contrary to previous notions large parts of the San Joaquin Valley were found to be absolutely without any representative of the genus. Neither in the vicinity of Tracy, Los Banos, or Raymond could song sparrows be found. A few were noted in the neighborhood of Fresno; and on the Fresno County side of the San Joaquin River near Lane Bridge (ten miles north of the city of Fresno) four specimens were secured. Mr. John G. Tyler, of Fresno, who was with me at this point, helped me to secure these and also contributed a nest with four slightly incubated eggs which he found in the river bottom close to our camp on April 7. Another nest with three fresh eggs was found on the 8th. In each instance the nest was located in low vegetation, against which drift-trash had lodged; in one case the nest was $2\frac{1}{2}$ feet above the ground, in the other four feet.

Song sparrows were found again only at Earlimart, Tulare County, where a male and two females were taken April 30 and May 2. These were the only individuals observed at this place, and were inhabiting a willow-margined reservoir.

The seven song sparrows secured, as just specified, are as uniform as usual, considering the normal range in individual variation; and they are very nearly duplicates of topotypes of *M. m. heermanni* from Fort Tejon, Kern County. The known range of *heermanni*, as lately restricted (see Grinnell, Univ. Calif. Publ. Zool. V, April 1909, p. 266), is thus extended north to include parts of the Tulare basin. *Heermanni* is distinct from *M. m. mailairdi* (Univ. Calif. Publ. Zool. VII, February, 1911, p. 197). The differences lie in the much paler "ground color" dorsally of *heermanni*, the narrower black-streaking both above and below and in the slightly smaller bill.

There is still a great stretch of country—between Fresno and Modesto—from which we have no *Melospizine* returns. There may be an actual hiatus between the ranges of *heermanni* and *mailairdi*. For, as our San Joaquin work has demonstrated, it is a grave mistake to assume that song sparrows range uniformly all over the bed of the Valley and up into the foothills. Rather are there only narrow belts of occupied ground, coinciding with sections of riparian strips. Vast areas of dry prairie intervene, unsuited to this bird. However, a circumstance accompanying human invasion will tend to obliterate these original conditions: Song sparrows were seen in the Fresno district along irrigation canals. These canals thus serve to divert a stream of riparian plants and animals, including the song sparrow, out over the plains between the rivers, by which process the fauna of the originally arid levels becomes metamorphosed. The ranges of the song sparrows of interior California may thus be expected to shift to a considerable extent from what they were or even are at the present stage of events.

An incident of interest though not of definite significance was that at the Earlimart reservoir referred to above there were two females, each with a nest, but only one male, at least at the time of my arrival, April 30. One of the females, shot together with the male on that date, contained very large ova (one egg would have been laid probably the next day), and her nest was apparently completed. The other female was taken on May 2 together with her nest and four fresh, or infertile, eggs. This bird was incubating, as the subdermal layer in the abdominal region was glandular to an extreme degree. This state of affairs (one male, and two females with nests) might be accounted for by any one of three explanations: (1) that there was another male at the reservoir, but destroyed by some means before my arrival; (2) that an excess female without a mate had gone ahead and built a nest and produced infertile eggs; or (3) that where there were more females than males, polygamy had occurred and the male had mated with two

females. It should be emphasized that these three song sparrows were the only ones found in the Earlimart neighborhood, and that the reservoir referred to (on the Moore ranch) was the only bit of favorable environment within a radius of at least three miles.

Forbush Sparrow (*Melospiza lincolni striata*). Four specimens quite typical of this form were shot at a marshy place in the San Joaquin river bottom near Lane Bridge, Fresno County, April 9 and 10. Tyler (CONDOR XIII, March 1911, p. 76) has already recorded this sparrow from the Fresno district, but as found in December.

Barn Swallow (*Hirundo erythrogastra*). A pair seen by both Mr. Tyler and myself on a telephone wire over a bridge near Fresno March 15. Doubtless the same pair was seen in the same place April 6. The former date appears to be the earliest on record for the arrival of this swallow within the State. Mr. Tyler tells me that very many Barn Swallows nest in Fresno County; and I found a pair nesting near Tipton, Tulare County, April 24.

Phainopepla (*Phainopepla nitens*). On March 11 I saw a male of this species among some valley oaks five miles northeast of Tracy, San Joaquin County. The bird was staying around clumps of mistletoe, which plant infested many of the oaks at this point. I also heard notes of Phainopeplas in the distance, though only the one individual was located; so it is not improbable that the occurrence was more than casual at this time and place. I saw a male of this species in the foothills at Raymond, Madera County, April 16.

California Shrike (*Lanius ludovicianus gambeli*). A nest of this species was observed near Pixley, Tulare County, April 29, containing seven well-incubated eggs. The notable feature of this nest was the site selected. The region is well-nigh tree-less, hence those birds under natural conditions selecting trees for nesting places and at the same time determined to remain in the region are compelled to resort to unusual sites for their nests. All through the valley, beginning April 20, the Western Kingbirds were building nests on telegraph poles and fence posts. The pair of shrikes in question had constructed their nest on top of one of the posts of a fence paralleling the county road where autos and other vehicles were constantly passing. The nest was sheltered by two boards converging overhead and nailed to the fence post vertically for the support of a telephone wire. The nest was typically constructed, the outer portion of an interlaced mass of stiff twigs flaring out broadly on the two unsheltered sides. To express it otherwise the nest was so firmly wedged between the two boards that it could not have been removed except by tearing it to pieces or removing the boards. In spite of its conspicuous position the venture gave promise of success.

California Least Vireo (*Vireo belli pusillus*). At Lane Bridge, ten miles north of Fresno, this bird had already arrived April 7. Several were heard or seen in the willow association along the Fresno County side of the San Joaquin River. Mr. Tyler says the species nests in the Fresno district.

Dotted Canyon Wren (*Catherpes mexicanus punctulatus*). There being no canyons or even steep-sided ravines, at Raymond, Madera County, the presence of the Canyon Wren was rather unexpected there. However the otherwise smooth and rounded foothills were marred by many low projecting ledges and boulder-piles. These evidently formed congenial and productive forage ground, though the two pairs of wrens discovered had each established headquarters in places of human construction—one in an abandoned cabin, the other in a granite quarry.

Mountain Bluebird (*Sialia currucoides*). Abundant on the newly sprouted grain fields around Tracy, San Joaquin County, the second week in March. This species was reported from several quarters as much more numerous than usual the past winter on the floor of the valley.—J. GRINNELL.

An Albino.—I have noticed two albino English Sparrows (*Passer domesticus*) lately. One specimen was a dirty gray, and the other, which I have seen several times, is pinkish cinnamon, with snow white tail and primaries.—W. E. UNGLISH.

The Bohemian Waxwing in Sacramento County, California.—That there has been a general visitation by this species to this state the past season is further indicated by the following record: Mr. W. H. Noble, of Galt, Sacramento County, California, sent to the Museum of Vertebrate Zoology a specimen (now no. 17210) of *Bombycilla garrula* taken at that place March 14, 1911.—J. GRINNELL.

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EDITORIAL NOTES AND NEWS

Mr. Edmund Heller has embarked upon a third expedition to British East Africa, in pursuit of big game. This time he is one of a party equipped with a string of cow ponies, a pack of bear dogs, and a moving picture machine. It would appear that an extreme of exciting adventure will be one pretty certain outcome of such a combination! However, Mr. Heller is the naturalist of the party, and will collect and prepare as scientific specimens, as much of the spoils as possible for the National Museum. He will particularly try to obtain material supplementary to the Roosevelt collections, which are the basis of an extended scientific report in course of preparation by Mr. Heller.

Mr. Fred M. Dille, a pioneer Colorado naturalist, has been appointed special warden by the U. S. Biological Survey, to investigate ornithological conditions in the vicinity of the Minidoka and Deer Flat reclamation projects in Idaho, and the Cold Spring project in Oregon. He assumes his new duties at once.

Mr. W. L. Burnett, who has long been identified with biological work in Colorado, has recently been appointed Curator of the Museum of the State Agricultural College, at Ft. Collins, Colorado. His new position will enable him to devote his entire time to biological work, and the college is to be congratulated upon securing the services of a man so emi-

nently equipped for the work he is to undertake. Mr. Burnett assumes his new position June 1st.

A few of the older members of the Cooper Club may be interested to know that Mr. H. B. Bailey, one of the founders of the Nuttall Club, American Ornithologists' Union, and Linnaean Society, has become an active worker in the ranks of ornithologists and oologists once more. Since his collection of eggs went into the Museum of Natural History in New York some years ago, he has done little active work along these lines. Having lately retired from business he has taken up his old hobbies and has joined forces with his son in a new Bailey Collection and Library. He left some time ago for Florida on an extensive trip after specimens.

Mr. Alex Wetmore, who has been at the Kansas State University for the past year, has left Lawrence, Kansas, for Seattle, Washington, where he is to join Mr. A. C. Bent and Rollo Beck in an extended collecting trip through the Aleutian Islands. Mr. Wetmore joins the party as a representative of the Biological Survey.

Mr. E. R. Warren left his home at Colorado Springs about the middle of May, for an extensive collecting trip through central and northern Colorado. Mr. Warren is thoroughly equipped with a sea-worthy prairie schooner, and expects to be in the field until fall.

According to our critic (T. S. P.) in April *Bird-Lore* it would appear that the illustrations in *THE CONDOR* have improved greatly since we dropped simplified spelling!

PUBLICATIONS REVIEWED

THE HOME-LIFE OF THE SPOONBILL, THE STORK AND SOME HERONS, by BENTLEY BERTHAM, F. Z. S. [Witherby & Co., London, 1910, pp. i-viii, 1-47, pl. 1-31. Price 6 s. net.]

Four species are treated, the Spoonbill, White Stork, Common Heron and Purple Heron. They were studied and photographed from blinds placed in marsh or tree top, as the case might be, and with what would appear to be most gratifying success. The photographs are beautiful and instructive, conveying much information of a sort that would be difficult to obtain from the best written accounts, while the accompanying text is couched in a most attractive style, and, though but a comparatively limited space is given to each species, contains a great deal of very interesting life history. The description of the actions of the young Purple Herons, deserting their nests in the tree-tops at the approach of danger, and taking refuge in the tangles of underbrush on the ground, each returning to his own home when the danger has passed, is of great interest; additional traits of this species as well as

of the others are related, in an equally entertaining style.

If any criticism be made of the manner of production of the book it would be to point out the fact that, with the exception of the Purple Heron, the species treated are nowhere alluded to by their scientific names, thus precluding the possibility of these truly valuable contributions to their life histories being anywhere cited in literature. A more definite statement as to the geographic locality of the colonies observed would also be desirable.—H. S. S.

MINUTES OF COOPER CLUB MEETINGS

SOUTHERN DIVISION

DECEMBER.—The December meeting of the Southern Division of the Cooper Club was held on Thursday evening, December 29, 1910, in Room 526 Merchants Trust Building. In the absence of President Morcom, the meeting was called to order by Vice President Lelande, with the following members present: Messrs Dawson, Howard, Zahn, Willett, Linton, Osburn, Antonin Jay, Davis, Robertson, Fischer, Miller, Owen, Lelande, Shephardson, Blaine, Tracy, Howell, Chambers and Law, and with Dr. Guy C. Rich as a visitor.

The minutes of the November meeting were read and approved. The following applications for membership were presented, Dr. Guy C. Rich, Hollywood, proposed by W. Lee Chambers, and Wilfred Smith, Santa Monica, proposed by O. J. Zahn. On motion by Mr. Willett, seconded by Mr. Zahn, and duly carried, the Secretary was instructed to cast the unanimous ballot of those present electing to active membership Mr. Fred Granville, proposed at the last meeting.

The Secretary presented the draft of the new Constitution proposed by the Northern Division, and on motion by Mr. Robertson, seconded by Mr. Miller, and duly carried, it was ordered referred to a committee consisting of Messrs. Robertson, Davis and Law for approval; said members to have the power of acting for the Club. On motion by Mr. Willett, seconded by Mr. Robertson, and duly carried, the nomination of officers for 1911 as made at the last meeting, and withdrawn because made one month too soon, were sustained. They are as follows: President, G. Frean Morcom, nominated by Mr. Willett; Vice President, H. J. Lelande, nominated by Mr. Shephardson; Treasurer, W. Lee Chambers, nominated by Mr. Willett; Secretary, J. E. Law, nominated by Mr. Osburn.

The Club then enjoyed a very thorough description of his work by Mr. W. Leon Dawson, outlining the work already accomplished on the Birds of Washington, and exhibiting a

great many of the plates used; also thoroughly detailing the proposed work on the Birds of California. This Mr. Dawson expects to complete in 1916, and to devote his time exclusively to its production. When completed it will be one of the most ambitious among bird works, and a handsome addition to any library.

Mr. Willett, who has in charge the compiling of the new list of the Southern California Birds, asks especially for notes from all those having winter records of the Hudsonian Curlew, Avocet, Stilt, Semipalmated Plover and Marbled Godwit. Adjourned. J. E. LAW, Secretary.

JANUARY.—The January meeting of the Southern Division of the Cooper Club was held on Thursday evening, January 26, 1911, in the office of H. J. Lelande, 246 Wilcox Building, Los Angeles. The meeting was called to order by President Morcom, with the following members present: Messrs Ingersoll, Rich, Howard, Lelande, Robertson, Howell, Appleton, Willett, Chambers, Dawson, Miller, Linton, Zahn, VanRossem, Shephardson, Blaine and Law.

The minutes of the December meeting were read and approved. The following applications for membership were presented: Orland Beekman, Sespe, Cal., proposed by Lawrence Peyton; and Olive Thorne Miller, Los Angeles, proposed by A. B. Howell. On motion by Mr. Robertson, seconded by Mr. Howard, and duly carried, the Secretary was instructed to cast the unanimous ballot of those present electing to active membership Dr. Guy C. Rich and Mr. Wilfred Smith, whose names were presented at the December meeting.

On motion by Mr. Zahn, seconded by Mr. Howard, and duly carried, Mr. Robertson was instructed to cast separately the unanimous ballot of those present electing for 1911 the officers nominated at the last meeting, as follows: President, G. Frean Morcom; Vice-President, H. J. Lelande; Treasurer, W. Lee Chambers; Secretary, J. E. Law.

Mr. Robertson, as Chairman of the committee on the Constitution, read the proposed new Constitution, clause by clause. Each one was discussed at length by the members present, and several suggestions made which the committee was instructed to embody into carefully worded clauses, and present for the approval of the Southern Division at the next meeting.

The Secretary read a paper by Mr. C. I. Clay, of Eureka, California, entitled "The Spotted Owl in Northern California." This recited Mr. Clay's very unique experience with the Spotted Owl, and its weird night notes, while camping in the wilds of Humboldt County. Adjourned. J. E. LAW, Secretary.

FEBRUARY.—The February meeting of the Southern Division of the Cooper Club was held on Thursday evening, February 23, 1911, in the office of H. J. Lelande, 246 Wilcox Building, Los Angeles. The meeting was called to order by President Morcom, with the following members present: Messrs. Miller, Robertson, Lelande, Willett, Davis, Rich, Wright, Chambers, Fisher, Lowe, Antonin Jay, Blaine, Van Rossem, Brower, Perez and Law.

The minutes of the January meeting were read and approved. The following applications for membership were presented: Walter Brower, Los Angeles, and Maurice Cory Blake, Nordhoff, California, by W. Lee Chambers. On motion by Mr. Robertson, seconded by Mr. Miller, and duly carried, the Secretary was instructed to cast the unanimous ballot of those present electing to active membership Messrs. Orland Beekman and Mrs. Olive Thorne Miller, whose names were presented at the January meeting. On motion by Mr. Robertson, seconded by Mr. Miller, and duly carried, action on the resignation of Mr. W. N. Lowe was postponed until next meeting.

The Secretary read copy of the communication forwarded by the Northern Division to the Senate Committee on Fish and Game, and on motion by Mr. Robertson, seconded by Mr. Miller, and duly carried, the same was ordered filed. A letter from Mr. Henry Oldys with reference to his lectures on bird subjects was read, and on motion by Mr. Rich, seconded by Mr. Willett, the Secretary was instructed to thank Mr. Oldys, and explain that the Club is not in a position at the present time to take the matter up.

The Club then took up the new Constitution as remodeled by the Committee, and on motion by Mr. Lelande, seconded by Mr. Willett, and duly carried, the present draft of the Constitution was adopted subject to the approval of the Northern Division. On motion by Mr. Miller, seconded by Mr. Willett, and duly carried, the Committee on the Constitution was discharged with thanks.

The Secretary then read an exhaustive paper by Mr. Joseph Grinnell on the "Distribution of the Mockingbird in California". Adjourned.—J. E. LAW, *Secretary*.

MARCH.—The March meeting of the Southern Division of the Cooper Club was held on Thursday evening, March 30, 1911, in the office of H. J. Lelande, 246 Wilcox Building, Los Angeles. The meeting was called to order by President Morcom, with the following members present: Messrs. Willett, Lelande, Miller, Owen, Robertson, Antonin Jay, Blaine, Perez, Zahn and Law.

The minutes of the February meeting were read and approved. The following applications for membership were presented:

Prof. Stephen Sargent Visher, Vermillion, S. D.; Lucius H. Paul, Newark, N. Y.; Maunsell S. Crosby, Rhinebeck, N. Y.; Herbert Parker, South Lancaster, Mass.; J. M. Edson, Bellingham, Wash.; W. J. Hoxie, Savannah, Ga.; Joseph Parker Norris, Jr., Philadelphia, Pa.; Eugene E. Caduc, Boston, Mass.; Philip Bernard Philipp, New York, N. Y.; Juliette A. Owen, St. Joseph, Mo.; Frederick H. Kennard, Newton Center, Mass.; Rowena A. Clarke, St. Louis, Mo.; Alexander Dawes Du Bois, Ithaca, N. Y.; J. H. Trumbull, Plainville, Conn.; Frank O. Pilsbury, Walpole, Mass.; W. B. Mershon, Saginaw, Michigan; Samuel S. Dickey, Waynesburg, Pa.; Roy Norris, Richmond, Ind.; J. F. Prazier, Audubon, Iowa; Elizabeth B. Davenport, Brattleboro, Vt.; all proposed by Mr. Alfred B. Howell; Benjamin Weed, San Francisco, Cal., proposed by J. Grinnell and Leon Lloyd Gardner, Claremont, California, by J. E. Law. These applications were held for action at the next meeting.

On motion by Mr. Robertson, seconded by Mr. Lelande, and duly carried, the secretary was instructed to cast the unanimous ballot of those present electing to active membership Messrs. Maurice Cory Blake and Walter Brower, whose names were presented at the February meeting.

On motion by Mr. Robertson, seconded by Mr. Owen, and duly carried, the Secretary was instructed to correspond with the Northern Division, and if the manuscript of "Belding's Water Birds of California" has not been placed in the Bancroft Library to see if it could not be arranged to have same deposited in the Museum of History, Science and Art in Los Angeles, to be under the control of the Cooper Club. Mr. Robertson stated that the Museum will be required to publish each year a list of everything received by the Museum and there will be additional funds for some publications of a special kind. The appropriations are liberal, and the buildings absolutely fire-proof, and the Museum is to be ready for occupancy by July, 1911. On motion by Mr. Willett, seconded by Mr. Robertson, and duly carried, the resignation of Messrs. H. N. Lowe, A. H. Keeney and Chas. L. Metz were accepted with regret.

The Secretary then read a paper by Loe Miller entitled "A Synopsis of Our Knowledge concerning the Fossil Birds of the Pacific Coast of North America". Adjourned.—J. E. LAW, *Secretary*.

NORTHERN DIVISION

JANUARY.—The January meeting of the Northern Division of the Club was held at the Museum of Vertebrate Zoology, Berkeley, on the evening of January 23, with President Grinnell in the chair, and the following mem-

bers present: J. Mailliard, J. W. Mailliard, E. Mailliard, E. W. Gifford, W. P. Taylor, H. C. Bryant, H. W. Carriger, T. Storer, O. J. Heinemann, H. L. Coggins, and H. S. Swarth.

The minutes of the December meeting were read and approved, and followed by the reading of the minutes of the Southern Division's December meeting. Two new members were elected, Edgar Boyer, of Sparks, Nevada, and J. D. Sornborger, of Rowley, Mass., both proposed at the last meeting by W. Lee Chambers. Eleven names were presented for membership: Frank E. Johnson, Yonkers, N. Y., proposed by W. Lee Chambers, and the following presented by A. B. Howell: T. H. Jackson, West Chester, Pa., O. E. Baynard, Gainesville, Fla., C. Brandreth, Ossining, N. Y., C. E. Brown, Boston, Mass., W. W. Cooke, Washington, D. C., R. W. Shufeldt, Washington, D. C., D. J. Nicholson, Orlando, Fla., Lynds Jones, Oberlin, Ohio, G. S. Guian, Napoleonville, La., A. A. Allen, Ithaca, N. Y.

Mr. Grinnell repeated a verbal report received from Mr. Wheeler, who was unable to be present. Mr. Wheeler had been appointed to look after certain mounted birds, the property of the Club, and supposed to be in the custody of one of the Oakland Public Schools. He had so far been unable to find the birds, but expressed his willingness to follow up the matter if the Club wished it, and he was instructed to do so.

The election of officers for 1911 was now in order, and as there were no contesting nominees for the various offices, a motion was made and carried that the secretary cast a ballot electing to office the nominees announced at the last meeting. The officers for 1911 are as follows: President, Joseph Mailliard; Vice-President, H. W. Carriger; Secretary, H. S. Swarth; Business Manager, W. Lee Chambers; Editor, Joseph Grinnell. A vote of thanks was then tendered the retiring officers for the excellent work done by them during the past year.

At the conclusion of this business the pleasurable program of the evening was taken up. Mr. H. C. Bryant gave a talk of his experience while conducting an educational exhibit of birds and mammals on the Agricultural Train through the northern part of the State. His work in ornithology deals with its economic side, and it was of decided interest to hear from him which species of birds were regarded as harmful, and which as beneficial, by the average farmer. The Meadowlark in particular seems to be in very bad repute in northern California; in fact, public opinion is so overwhelmingly against it that it seems doubtful whether it can be kept any longer on the list of protected species.

After a discussion of the points brought up a

motion was made by J. W. Mailliard, seconded by E. W. Gifford, that the President appoint a committee of three to confer with the State Fish and Game Commission to ascertain in what manner the Cooper Club may best further the cause of bird protection in the State Legislature, and that the committee be authorized to take such action as it saw fit. The motion was passed and a committee appointed consisting of J. Grinnell, J. S. Hunter, and J. W. Mailliard.

Mr. Grinnell then read a paper on the "Distribution of the Mockingbird in California," which was afterwards discussed at some length.—H. S. SWARTH, *Secretary*.

FEBRUARY.—The February meeting of the Northern Division of the Cooper Club was held on Saturday evening, February 18, at the office of the State Fish and Game Commission, Merchants Exchange Building, San Francisco. President Mailliard was in the chair, and the following members present: W. P. Taylor, J. Grinnell, D. A. Cohen, Gaylord K. Snyder, E. W. Gifford, D. C. Brown, H. W. Carriger, H. Coggins, O. J. Heinemann, J. S. Hunter, T. Storer, and H. S. Swarth. Mr. George Schussler was a visitor.

The minutes of the January meeting were read and approved, followed by the reading of the minutes of the January meeting of the Southern Division.

Acting on the names of the eleven applicants for membership, proposed at the January meeting, a motion was made and carried that the secretary be instructed to cast a ballot declaring them elected to membership in the Club. The following applications for membership were then presented: Reginald C. Barker, Blackwater, Arizona, proposed by M. French Gilman; Owen Durfee, Fall River, Mass., by W. Lee Chambers; Robert Barbour, Montclair, New Jersey, and H. Nehrling, Gotha, Florida, by A. B. Howell; and F. M. Lane and Nita A. Blayney, both of Fresno, California, by John G. Tyler. The resignation of Mr. Geo. J. Obermuller was read and accepted.

The report of the business manager for 1910 was then read. Circumstances prevented Mr. Chambers from placing a detailed report before the meeting, but his concise statement of the financial status of the Club, and *THE CONDOR*, was extremely gratifying. A vote of appreciation was extended to Mr. Chambers for the excellent results he has accomplished.

A letter was read received from Mr. W. C. Wood, Superintendent of the Alameda City Schools, relative to certain mounted birds, the property of the Club. Mr. Roswell S. Wheeler had been appointed to ascertain the whereabouts of these birds, and the secretary was instructed to request from Mr. Wheeler a list of

the said mounted birds, the species and number of specimens of each.

Messrs. Grinnell, Mailliard, and Hunter had been appointed a committee to ascertain in what manner the Cooper Club could best co-operate with the State Fish and Game Commission, for the protection of the birds of the State, and Mr. Mailliard read a letter that the Committee had addressed to the Chairman of the Assembly Committee on Fish and Game, expressing the confidence of the Club in the policy of the Fish and Game Commission, and urging that the present laws be upheld.

Mr. W. P. Taylor, as chairman of the Committee on securing the meeting of the American Ornithologists Union in San Francisco in 1915, made the following recommendation: Whereas the purpose for which this committee was appointed would at this stage best be subserved by co-operation with the Pacific Association of Scientific Societies, it is therefore recommended that the first annual meeting of the Cooper Ornithological Club as a whole be held at the University of California, Berkeley, on March 31 and April 1, 1911, in conjunction with the annual meeting of the Pacific Association. Mr. Taylor's report was accepted, and it was moved and seconded and duly carried, that the committee be instructed to further co-operate with the Pacific Association, and to arrange for a joint meeting of the societies, as recommended.

A discussion arose as to the proper disposal of the manuscript of Belding's "Water Birds of California", now in possession of the Club, and it was finally decided to place it on deposit in the Bancroft Library, if the rules of that institution so permitted.

Mr. Coggins read an entertaining and interesting communication he had recently received from Mr. Witmer Stone, of Philadelphia. Adjourned.—H. S. SWARTH, *Secretary*.

MARCH.—The March meeting of the Cooper Club was held on March 31 and April 1, in conjunction with the first annual meeting of the Pacific Association of Scientific Societies. The business meeting was held on the evening of March 31, at the Mint Restaurant, San Francisco, with President Mailliard in the chair and the following members present: John Mailliard, Ernest Mailliard, J. Grinnell, W. P. Taylor, O. Heinemann, H. Coggins, W. K. Fisher, C. Littlejohn and H. W. Carriger; and with E. A. McIlhenny as a visitor.

The minutes of the previous meeting were read, and approved as read, followed by reading of the minutes of the Southern Division. The secretary was instructed to cast a ballot electing to membership in the Club the following, whose names were proposed at the last meeting: F. M. Lane, Fresno, Cal.; Nita A.

Blayne, Fresno, Cal.; Reginald C. Barker, Blackwater, Ariz.; Owen Durfee, Fall River, Mass.; Robert Barbour, Montclair, N. J.; H. Nehrling, Gotha, Florida.

The following proposals for membership were read, to be acted upon at the next meeting: Elizabeth B. Davenport, Brattleboro, Vt.; J. F. Frazier, Audubon, Iowa; Roy Norris, Richmond, Indiana; S. S. Dickey, Waynesburg, Pennsylvania; W. B. Mershon, Saginaw, Mich.; Frank O. Pillsbury, Walpole, Mass.; J. H. Trumbull, Plainville, Conn.; A. D. DuBois, Ithaca, N. Y.; Rowena A. Clarke, St. Louis, Mo.; F. H. Kennard, Newton Center, Mass.; Juliette A. Owen, St. Joseph, Mo.; P. B. Philipp, New York; Eugene E. Caduc, Boston, Mass.; Joseph Parker Norris, Philadelphia, Pa.; W. J. Hoxie, Savannah, Ga.; J. M. Edson, Bellingham, Wash.; W. T. Shaw, Pullman, Wash.; H. J. Rust, Coeur d'Alene, Idaho; J. F. Stephens, Lincoln, Neb.; F. H. B. Jordan, Lowell, Wash.; F. Kermode, Victoria, B. C.; all presented by A. B. Howell; Miss Louise Kellogg, Oakland, Cal., proposed by J. Grinnell; and Carl Mueller, Marysville, Cal., proposed by W. Lee Chambers.

Mr. Grinnell reported that the authorities of the Bancroft Library had expressed their willingness to have the manuscript of Belding's "Water Birds of California" (the property of the Club) deposited in the library, and it was decided to do so.

Mr. W. P. Taylor reported on the actions and progress of the Pacific Association of Scientific Societies. A report was received from Mr. Roswell Wheeler on the condition of certain mounted birds, the property of the Club, now in an Oakland school.

Certain changes in the new Club Constitution, suggested by the Southern Division, were read and discussed, and the matter was referred to the committee that originally had the matter in charge. Letters were read from Dr. R. W. Shufeldt, Mr. G. S. Guion, and Mr. Witmer Stone; and Mr. McIlhenny and Mr. Littlejohn entertained the Club with accounts of their Alaska experiences.

On the afternoon of April 1 the Club met in California Hall, University of California to listen to an illustrated lecture by Dr. W. K. Fisher on the bird colonies of Laysan Island. He was followed by Mr. H. L. Coggins who spoke on "An Apology for Popular Ornithology". Owing to the absence of Mr. Loye Holmes Miller, his paper on fossil birds was read by title. After these lectures, which were open to the public, the Club members met informally in the Museum of Vertebrate Zoology. In the evening most of the members attended the general meeting of the Pacific Association of Scientific Societies.—H. W. CARRIGER, *Secretary, pro tem*.



For Sale, Exchange and Want Column.—In this space members of the Cooper Club are allowed one notice of about 35 words in each issue free of charge. Books and magazines can be offered for sale or exchange; bird skins and eggs can be offered in exchange, but *not for sale*. Notices must be written plainly, on one side only of a clean sheet of paper. For this department address W. LEE CHAMBERS, *Eagle Rock, Cal.*

If your subscription or dues are delinquent please remember the management needs the money to meet current bills, and send the cash in at once.

EUREKA FOLDING CANOE for sale or exchange. Suited for bird work in marsh or lake. Can be checked as baggage. Good as new. Will exchange for desirable sets. A. A. DU-BOIS, *Ithaca, N. Y.*

OSPREYS WANTED—I, 2; III, 8, 9, 10; IV, 3; V, 7, 9; N. S., 3, 4. Will pay \$6.00 for Bird-Lore I, II, III. LAUREN TREMPER, 136 No. Dewey St., Philadelphia, Pa.

WANTED—Audubon, Ornith. Biography, vols. 2, 4, 5; Nuttall, Manual, 1840, 2 vols.; Bull. Cooper Club, I, no. 1; Bird Lore, vol. II, no. 2; and others. Also bird skins. B. H. SWALES, *Grosse Ile, Mich.*

WANTED—Wilson Bulletin 2, 4; The Oologist, Utica, N. Y., vol. I complete; II, 1, 2; III, 8, 9; IV, complete; V, complete; Bulletin of the Cooper Ornith. Club, vol. I, odd nos. W. LEE CHAMBERS, *Eagle Rock, Cal.*

FOR EXCHANGE—At a bargain, sets and singles of such species as Northern Phalarope, Semipalmated Plover, Am. Rough-legged Hawk, Snowy Owl, Raven, Snowflake, Lapland Longspur, Tree Sparrow, Am. Pipit, Gray-cheeked Thrush, etc., because one or more eggs are imperfect or a part of the set has been destroyed. I collect sets of birds of prey only, but also desire living turtles and certain other reptiles. J. D. SORNBORGER, *Rowley, Mass.*

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WANTED—Nidologist: Vol. I, all except no. 9; Vol. III, no. 12; Osprey: Vol. I, nos. 2, 4, 6, 8, Vol. IV, no. 3, Vol. V, all nos.; Condor: Vol. I, no. 2; Auk: Vol. IX, no. 3, and other whole volumes. Cash or sets offered. DR. T. W. RICHARDS, U. S. NAVY, 1911 N Street, N. W., Washington, D. C.

WANTED—First-class sets, any variety, of Pine Grosbeak; Hermit, Mangrove, Orange-crowned, Tennessee, Sennett, and Connecticut Warblers; Salt Marsh Yellow-throat and Belding Yellow-throat; Oregon, Alaska, Gray, Texas and Blue-eared Jay, Spotted Owl. E. ARNOLD, *Freight Claim Agent, Grand Trunk Ry., Montreal, Canada.*

WANTED—Wheelock's "Birds of California"; Goss's "Birds of Kansas"; any or all numbers of the "Iowa Ornithologist." J. L. SLOANAKER, *Raisin, Fresno Co., Cal.*

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WANTED FOR CASH—In original covers, clean and in perfect condition for binding: Wilson Bulletin, nos. 4, 6, 7; The Osprey (new series), vol. I, 1902, no. 7; The Oologist, vol. III (1886), no. 4, vol. IV (1887), nos. 1, 3, 4; vol. V (1888), no. 6, vol. VI (1889), no. 4, nos. 139 and 266; The Journal of the Maine Orn. Soc., vol. IV, nos. 2, 3, 4, vol. V, nos. 1, 4; The Iowa Ornithologist, vol. II, nos. 1, 2, 4, vol. IV, nos. 1, 2, 3, 4.—G. H. MESSENGER, *President Linden Bank, Linden, Iowa.*

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